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STUDIES IN THE ADMINISTRATIVE AND ECONOMIC HISTORY OF TEBTUNIS IN THE FIRST CENTURY A. D.

by

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Date: April 30, 1973

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Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Classical Studies in the Graduate School of Duke University

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ABSTRACT

(History - Ancient)

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STUDIES IN THE ADMINISTRATIVE AND ECONOMIC HISTORY OF TEBTUNIS IN THE FIRST CENTURY

Abstract

This dissertation is a study of the economy of Tebtunis, a Fayum town in Roman Egypt, during the middle of the first century.

The main sources are three long papyri which contain registers of business contracts, called anagraphai, covering the last four months of A.D. 42 (P Mich. II, 121), the entire year A.D. 45-6 (P Mich. II 123), and the first four months of A.D. 46-7 (P Mich. V 238). These papyri originated from the grapheion of Tebtunis which was the town's notarial bureau and were drawn up by Kronion, the man in charge of the office. Using these three papyri and others from the University of Michigan collection, a study is made of the operations of the grapheion, the business volume of the town, and the nature of the business contracts into which the Tebtunites entered. Finally, the economic data is applied to the question of the existence and date of the disastrous Nile flood which was supposed to have occurred during the reign of Claudius.

Chapter I serves as an introduction to the economic survey by narrating the history of the grapheion and its superintendents and by describing the private lives of the professional scribes who wrote for

the town's many illiterates. These professional scribes owned land and sometimes held secretarial posts for groups of priests or farmers. The professional scribes ranged in age from twenty-two to seventy-two, with most of them in the thirty to fifty-year old group. The grapheion, with its inefficient operating procedure, was part of the vast Egyptian archival system, and was closely connected to an unknown bureau in the metropolis whose offical visited the office frequently.

Chapter II presents the business volume of the town. An average of 232 contracts were entered in the registers per quadrimester (four-month periods); the average per month was 58; the average per day, 3.6. Most of the business volume was contracted around the turn of the year, the months Epeiph to Neos Sebastos (Hathyr), and the height of the Nile flood.

About 55 percent of the days of the month were used for entering contracts in the registers. The hemerai Sebastai, Augustan anniversaries, had no effect on the business volume of the grapheion, with the possible exception of the Augustalia, the fifteenth of the month, which is very low in volume.

Chapter III investigates economic and social implications of selected contracts from the registers and their numbers. There were fewer regular leases and more prodomatic leases made at the beginning of A.D. 46-7 than A.D. 45-6. The prodomatic lease could hide a loan. More wet nurse contracts were made, possibly because bad times compelled the poor to expose their infants and hire themselves out as wet nurses. No apprentice contracts were made between Pachon, A.D. 46 and Choiak, A.D. 46. The relatively fewer dowry settlements

at the beginning of A.D. 46 and their higher value perhaps shows that only richer people could afford a dowery at this time. The contracts of indebtedness, the deposits, loans, residency contracts and mortgages, with the exception of the latter all increase from one year (A.D. 45) to the next. About 33 percent of all the contracts listed in these registers were loans.

The conclusion is that the year A.D. 45-6 is a good candidate to be the year of a very high flood, said by literary and epigraphical sources to have occurred in the reign of the emperor Claudius. The effects were country-wide and long lasting.

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ABBREVIATIONS

Journals

The abbreviations of journals and periodicals are the same as those listed in L'Annee Philolgique (Paris, 1927-) with the following additions:

ZSSRA Zeitschrift der Savigny-Stiftung fuer Rechtsgeschichte: Romanistische Abteilung (1880-)

Archiv Archiv fuer Papyrusforschung (1901-)

Papyri

The abbreviations for papyrus collections follow those listed in E.G. Turner's Greek Papyri: An Introduction (Princeton, 1968), pp. 156-171 with the following additions:

P Mich. Browne Browne, G.M. Documentary Papyri from the Michigan Collection. American Studies in Papyrology, VI (Toronto, 1970).

P Mich. Shelton Shelton, J. Papyri from the Michigan Collection. American Studies in Papyrology, IX (Toronto, 1971).

P Petaus Youtie, H.C. et. al. Das Archiv des Petaus. Papyrologica Coloniensia, IV (Koeln, 1969).

P Yale Oates, J.F., Samuel, A.E., Welles, C.B. Yale Papyri in the Beinecke Rare Book and Manuscript Library. American Studies in Papyrology, II (New Haven and Toronto, 1967).

Other Works

Adams, Paramone Adams, B. Paramone und verwandte Texte: Studien zur Diensvertrag im Recht der Papyri. (Berlin, 1964).

Bonneau, Cru du Nile Bonneau, D. La Cru du Nile: Divinité Égyptienne. (Paris, 1964).

Caldarini, "Gli ἀγοράμματοι " Caldarini, P. " Gli ἀγοράμματοι " nell' Egitto greco-romano." Aegyptus 30 (1950), 14-41.

Crotti, "Rapporti" Crotti, G.S. "Rapporti tra Theogonia e Tebtunis." Aegyptus 42 (1962), 103-113.

Festschrift Oertel Braunert,H. ed., Studien zur Papyrologie und antiken wirtschaftsgeschichte - Friedrich Oertel. (Bonn, 1964).

Henig, Bodenpacht Henig, D. Untersuchungen zur Bodenpacht im ptolemaeisch-roemisch Aegypten. (Munich, 1967).

Herrmann, Bodenpacht Herrmann, J. Studien zur Bodenpacht im Recht der graeco-aegyptischen Papyri. Muenchner Beitraege, XLI (Munich, 1958).

Husselman, "Donationes" Husselman, E. "Donationes Mortis Causa." Transactions and Proceedings of the American Philological Association 88 (1957), 135-154.

Husselman, "Procedures" Husselman, E. "Procedures of the Record Office of Tebtunis in the First Century A.D. American Studies in Papyrology, VII (Twelfth International Congress of Papyrology) (Toronto, 1970), 223-238.

Husselman, "Two New Documents" Husselman, E. "Two New Documents from the Tebtunis Archive." Transactions and Proceedings of the American Philological Association 81 (1950), 69-77.

Johnson, Roman Egypt Johnson, A.C. Roman Egypt to the Reign of Diocletian. Vol. II of An Economic Survey of Ancient Rome, T. Frank, editor (Baltimore, 1936).

Lewis, Compulsory Services Lewis, N. Inventory of Compulsory Services in Ptolemaic and Roman Egypt. American Studies in Papyrology, III (New Haven and Toronto, 1968).

M. Chrest., M. Grund., W. Chrest., W. Grund. Mitteis, L. and Wilcken, U. Grundzuege und Chrestomathie der Papyruskunde. (Leipzig, 1912), 4 volumes.

P.M. Meyer, Jur. Pap. Meyer, P.M. Juristische Papyri (Berlin, 1920).

Oertel, Die Liturgie Oertel, F. Die Liturgie: Studien zur ptolemaeischen und kaiserlichen Verwaltung Aegyptens. (Leipzig, 1917).

Pierce, "Grapheion" Pierce, R.H. "Grapheion, Catalogue, and Library in Roman Egypt." Symbolae Osloenses 43 (1968), 68-83.

Preisigke, Fachwoerter Preisigke, F. Fachwoerter des oeffentlichen Verwaltungsdienstes. (Goettingen, 1915).

Preisigke, Girowesen Preisigke, F. Girowesen im griechischen Aegypten. (Strassburg, 1920).

Preisigke, Woerterbuch Preisigke, F. Woerterbuch der Papyrusurkunden. (Berlin, 1925).

Rostovtzeff, SEHRE Rostovtzeff, M.I. Social and Economic History of the Roman Empire. (Oxford, 1926).

Samuel, "Paramone Clauses" Samuel, A.E. "The Role of Paramone Clauses in Ancient Documents." Journal of Juristic Papyrology 15 (1965), 221-311.

Segrè, "Note sul documento" Segrè, A. "Note sul documento greco-egizio del grapheion." Aegyptus 7 (1926), 97-107.

Snyder, "ἡμέραι Σεβασταί" Snyder, W.F. "ἡμέραι Σεβασταί Aegyptus 18(1938), 227-233.

Taubenschlag, Law[2] Taubenschlag, R. The Law of Graeco-Roman Egypt in the Light of the Papyri, 332 B.C.- A.D. 640. 2nd. ed. (Warsaw,1955).

Von Woess, Urkundenwesen Woess, F. von. Untersuchungen ueger der Urkundenwesen und den Publizitaetschutz im roemischen Aegypten. Muenchner Beitraege, VI (Munich, 1924).

Wallace, Taxation in Egypt Wallace, S.L. Taxation in Egypt from Augustus to Diocletian. (Princeton, 1938).

Westermann, "The Apprentice System" Westermann, W.L. "Apprentice Contracts and the Apprentice System in Roman Egypt." Classical Philolgy 9 (1914), 295-315.

Westermann, "Paramone" Westermann, W.L. "The Paramone as a General Service Contract." Journal of Juristic Papyrology 2 (1948), 9-50.

Westermann, Slave Systems Westermann. W.L. The Slaves Systems of Greek and Roman Antiquity. Memoires of the American Philosophical Society, XL (Philadelphia, 1955).

Waszinsky, Bodenpacht Waszinsky, S. Die Bodenpacht: agrargeschichtliche Papyrusstudien. (Leipzig, 1905).

Zambon, "Διδασκαλικαί" Zambon, A. "Διδασκαλικαί" Aegyptus 15 (1936), 3-66.

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NOTE

Quotations from the text of the Tebtunis papyri reproduce the spelling of the original. The usual critical marks have been employed for quotations from the papyri: parentheses ( ) are used to indicate solutions of abbreviations and symbols. Square brackets [ ] show a lacuna in the text. Dots used alone denote traceable but illegible letters. Dots under letters indicate that these are uncertain or badly mutilated. The letter ϛ has been used to represent the Greek number six.

CHAPTER I

THE GRAPHEION OF TEBTUNIS

Introduction

The Fayum was Roman Egypt's paradise. Its area of fertile fields, swaying palm trees, grey-green olive groves, fragrant rose bushes, dotted with towns on its circumference and with a city at its heart, contrasted sharply with the naked wastes beyond. This unique region was a depression in the Libyan desert which had been covered by the waters of Lake Moeris up to the time of the Macedonian Conquest. When Lake Moeris shrank in size to cling to the north-western corner of the depression, it left behind soil fertile enough to attract the colonizing thousands sent by the second and third Ptolemies. As the newly cultivated soil grew grain and other crops, cities and towns grew with them. One of these towns was Tebtunis, situated on the southern rim of the basin in the division (μερίς) of Polemon.[1]

The Tebtunis of the Julio-Claudian era was connected to the metropolis, Arsinoe, the source of her bureaucracy, by the "great

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1. A.E.R. Boak, "Irrigation and population in the Faiyum, the garden of Egypt," Geographical Review, 16 (1926), pp. 353-364; P Tebt. II, Appendix II, pp. 343-424; Chambers Encyclopedia, IV (London; 1868), "Fayum" p. 269. The Arsinoite nome was divided into three merides: Polemon, Themistes and Herakleides.

road" and by a steady stream of documents which emanated from the village notariate, and to the Nile, the source of her fertilizing waters, by a series of ditches and canals, mainly the Polemon Canal (Bhar Gharaq).[1] Tebtunis was also connected to the surrounding towns of Talei, Theogonis and Kerkesoucha Orous for which it was a cultural, religious and administrative center.[2] It is mainly as a center for certain aspects of village administration that Tebtunis is known, because an archive from the early first century A.D. has survived. It consists of a number of documents from the grapheion of Tebtunis.

A grapheion was a writing bureau, a document depository, and the village notariate. The Tebtunis grapheion also had the village of Kerkesoucha Orous within its jurisdiction had close connections to the grapheion in Talei.[3] The grapheion was operated by a manager called "the man in charge of the grapheion" (ὁ πρὸς τῷ γραφείῳ) and in this town he was also called the nomographos (νομογράφος) during the first century A.D.[4] The grapheion post was voluntarily leased from the nome or central government in exchange for monthly payments of a rent called a diagraphe (διαγραφή) to some unknown higher authority in Arsinoe, the nome capital.[5] The men in charge

---

1. A.E.R. Boak, op. cit. p. 355, fig. 1.
2. Crotti, "Rapporti," p. 104.
3. P Mich. II 121 verso, line 1 for Kerkesoucha Orous; P Mich. V 251, 287, 311, 312 for Talei. See below for the relationship of the grapheion and other bureaus.
4. Pierce, "Grapheion," p. 69, note 6; Husselman, "Procedures," p. 224 says that the title of nomographos and its precise meaning is uncertain.
5. P Mich. II 123, introduction, pp. 94-96.

of the Tebtunis grapheion during the time covered by this archive were Apion and his son and successor, Kronion.

The documents from the administration of Apion and Kronion extend from A.D. 7 to A.D. 56. One hundred and thirty-seven of these have been published in the Michigan collection.[1] This group consists of two different types of documents: many varieties of business contracts in various stages of completion and eight other, sometimes very long, papyri which served as indices and abstracts of the original documents as well as grapheion accounts. These are the incomplete anagraphai, eiromena and accounts for the years A.D. 45-9 compiled by Kronion. Eighteen papyri that are duplicates of some of the Michigan group have been published by the Società italiana per la ricerca dei papiri greci e latini in Egitto,[2] and miscellaneous other Tebtunis papyri from the early first century appear elsewhere.[3]

While all the components of this archive provide economic, social and administrative data, the documents which are particularly valuable for this are the anagraphai and eiromenon. An anagraphe (ἀναγραφή) is a chronological list or register of titles of contracts and the other documents prepared by the grapheion staff within a certain time period, usually quadrimestrially, or yearly.[4]

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1. P Mich. II (Tebtunis, part 1); P Mich. V (Tebtunis, part 2).
2. P.S.I. 901-918.
3. P Tebt. II contains thirteen documents from the early first century; Husselman, "Two new documents," has two more (P Mich. inv. 631; 1431=SB 9109-9110); Also P Yale 67; P Princet. 146; P Mich. Browne 586, 587; P Mich. Shelton 621.
4. The Egyptian year of twelve months was divided into three quadrimesters of four months each.

There are several types of anagraphai extant. There is the year-long anagraphe in which all documents prepared by the grapheion are listed with notation of the fees paid or, in some cases, owed, and periodic summaries of these fees. P Mich. II 123 recto is the main example of this type. Then there is the shorter anagraphe, covering only four months of the year, which lists the contracts prepared and their preparation fees. This anagraphe is represented by P Mich. V 238. The third anagraphe lists the contracts drawn up in the office, but with no notation of the fees. This type of four-month anagraphe is associated in the Tebtunis papyri with an eiromenon, a series of abstracts in chronological order which corresponds to the originals prepared at the grapheion and the anagraphe entries. P Mich. II 121 preserves an anagraphe and parts of its eiromenon, the former on the verso and the latter on the recto.

Some of the grapheion accounts appear in conjunction with these anagraphai and eiromena. P Mich. II 123 verso preserves part of the grapheion accounts which list receipts and expenditures for the sixth year of Claudius and part of the seventh (A.D. 45-6). P Mich. II 127 contains some of Kronion's personal accounts for the same time period.

The three main anagraphai are P Mich. II 121, 123, and P Mich. V 238, which will provide the basis for the economic study in chapter two. There are several other anagraphai and eiromena which are more fragmentary and in some cases duplicate parts of the three long and well-preserved documents as well as each other. These are

P Mich. II 124, 125, 126, 128; V 237, 239, 240.[1] One short eiromenon of four abstracts is found in P Mich. V 241. Accounts also appear on P Mich. II 125, 128.

Anagraphai adhered to a general form, although the contents sometimes differed slightly. The title of the document appears in the first lines as: "The second year of Tiberius Claudius Augustus Germanikos Imperator. The anagraphe of the grapheion of Tebtunis and Kerkesoucha Orous."[2] Usually, the name of the month and first business day is written next. The days of the month for which entries are made appear in the margins without repetition of the name of the month or the day for each entry. The form of a typical entry is: (day in the margin) Homology (or syngraphe or other document form) of X to Y of a lease (for example), 5 arouras. If the grapheion fee (grammatikon) is listed, as in P Mich. II 123, V 238, then it follows the last word of the entry.

The eiromenon, the companion piece to the anagraphe, contained abstracts that matched the entries of the register. The abstracts are usually fairly short and follow the form:[3]

a) X, son of Y, (Persian of the epigone) signalments
b) has leased (for example) to
c) Z, son of A, signalments
d) amount and location of land
e) abbreviated conditions of the lease
f) M, son of N, as signatory, signalments. "The rest in conformity." [4]

---

1. Husselman, "Procedures," pp. 232-235 has a list of the lines and their duplications.
2. P Mich. II 121 verso, line 1.
3. This form was altered slightly for alimentary contracts. One of the alimentary contracts, Col. II, ii, is longer and more detailed than other abstracts.
4. τὰ ἄλλα ἀκλούθως.

While the form is basically the same, the three main anagraphai differ slightly in the contents. P Mich. II 121 and V 238 list only business contracts such as loans, leases, work agreements, sales, cessions. P Mich. V 238 also notes the grammatikon fee while 121 does not. P Mich. II 123 lists business contracts such as homologiai, misthoseis, daneia, praseis, syngraphai trophitides, didaskalikai, other varieties of sungraphai, homologies specifically called doseis, enchoreseis, ekstaseis even as 121 and 238 do. In addition 123 lists other documents like hyponemata, hyponematia, anaphoria, graphai and nomoi sunodon. P Mich. II 123 also lists the grammatika paid or owed by the contracting parties and periodically the register is interrupted by summaries of these receipts.

These documents are particularly useful to study the business volume by quadrimester, month and day, both the general volume and the volume of each separate type of contract. It is also possible to see trends or patterns of distribution of the contracts over the months. In all, there are twenty months covered by the three anagraphai. P Mich. 121 covers the last four months of the second year of Claudius (A.D. 42) and P Mich. II 123 and 238 taken together extend from the beginning of the sixth year of Claudius (A.D. 45-6) through to the end of the first four months of the seventh year. These two documents, then, encompass sixteen consecutive months.

Apart from these longer documents there is the larger group of short documents, spanning the first half of the century from A.D. 7 to A.D. 56. These papyri contain complete contracts or,

more often, parts of contracts, which cover the same wide range of business activities as the anagraphai and in some ways illustrate the nature and provisions of the contracts listed in those registers. In only one instance, however, is the original document found for an anagraphe entry.[1]

Most of these papyri which included nomoi and graphai along with the contracts contain subscriptions (ὑπογραφαί) whose main texts (σώματα) have been lost. A subscription (ὑπογραφή) is a declaration of each party to the contract that he agreed to the terms stated in the body of the contract. Since many people were illiterate they often employed scribes to write the subscription on their behalf. Such a stand-in was called a hypographeus (ὑπογραφεύς) whose signalments (that is his age and physical description) were included in the contract. The abstracts of the eiromenon also mention the name of the signatory.

The combination of the data from the anagraphai and the supporting evidence of the abstracts, contracts and subscriptions should give a picture of the economy of the middle of the first century A.D. In particular, this study may add further fuel to the arguments for or against the placing of the abnormally high flood, dated to the reign of Claudius,[2] between the years A.D. 44-46.

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1. P Mich. V 238, 151 = P Mich. V 322a.
2. K.S. Gapp, "The Universal Famine Under Claudius," Harvard Theological Review, 28 (1935), pp. 258-265; P Mich. Browne, 594, introduction, pp. 64-66; A.C. Johnson, "Papyri from Tebtunis, I," AHR 40 (1935), pp. 480-482.

Before considering the economic data, however, it is necessary to look at the grapheion itself, the source of the economic data, to see how it functioned, who managed it, who worked there. In addition, one can trace the relationships of three of the four Tebtunis families whose family papers form sub-archives to the larger grapheion archive. The families of Psuphis, called Harpokration, and Eutychos the Elder, son of Eutychos, provided scribes for the grapheion while a descendant of the family of Herakleides the Younger, son of Maron, gained control of the grapheion at the end of the first century.[1] The first chapter, then, deals with the administration of the grapheion and the second and third chapters with the economy of the village as seen in the grapheion documents. The grapheion story begins, of course, with its manager.

---

1. For the families, see P Mich. V, introduction, pp. 14-22 and below.

The Man in Charge of the Grapheion

The history of the grapheion of Tebtunis is bound to the sequence of officials who ran the bureau during the first two centuries A.D. There are seven men whose names appear in documents from this office between the years A.D. 7 to A.D. 198.[1] Upon a survey of these men, it is clear that the job of nomographos or "the man in charge of the grapheion" (ὁ πρὸς τῷ γραφείῳ) tended to remain in the same family, but not exclusively. Apion and his son Kronion begin this roster of officials in the grapheion.

Apion was the first nomographos of Tebtunis under the Roman domination. His tenure lasted from A.D. 7 or before to about A.D. 25-6. Few of his dockets remain; only two of the nine documents preserved from this time were written by him. In A.D. 7 he put his docket to an agreement not to prosecute: (date) ἀναγέγραπται/ (διὰ) Ἀπίωνος νομογράφου Τεβτύνεως .[2] On September 13, A.D. 25 (Sebastos 16, in the eleventh year of Tiberius), Apion drew up the oath of the sluice guards and acted in the capacity of a scribe writing for illiterates. He wrote at this time in a "rather irregular cursive."[3] This irregularity of handwriting may be indicative of failing health and/or advanced age because that is the last reference to Apion as an active nomographos. Sometime between September 13, A.D. 25 and September or November 15, A.D. 26, Apion died and his son, Kronion took over the position of "the man in charge of the grapheion."

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1. See Table 1 for a complete survey of the nomographoi.
2. P Mich. V 345, lines 7-8.
3. P Mich. V 233, introduction, p. 44.

TABLE 1

THE NOMOGRAPHOI OF TEBTUNIS IN THE FIRST TWO CENTURIES A.D.

Names	Dates	References	Remarks
Apion	Before A.D. 7 to A.D. 25-6	P Mich. V 345 (A.D. 7) P Tebt. II 586 (A.D. 20-1) P Mich. V 233 (A.D. 25) P Mich. inv. 631 (A.D. 25-6)	His title is nomographos Tebtuneos in all four documents.
Kronion, son of Apion	A.D. 25-6 to A.D. 52-6	P Mich. inv. 631 (A.D. 25-6) P Mich. inv. 1431 (A.D. 31) P Mich. II 123 verso (A.D. 45-6) P Mich. II 127 (A.D. 45-7) P Tebt. II 383 (A.D. 46) P Mich. V 353 (A.D. 48) P Mich. V 354 (A.D. 52)	Took over from his father, Apion, in A.D. 25-6 and assumed title of nomographos A.D. 37 or earlier. Many documents, including the long register 121 and 123, are in his hand. Wrote Demotic and Greek. His son, Apis, did not succeed him.
Eutychas (Eutycheides)	A.D. 45 to ca. A.D. 49	P Mich. II 123 recto (A.D. 45) VIII 10, 45 and others. P Tebt. II 383 (A.D. 46)	Kronion's partner for about five years and possibly his successor. Handled the finances.
Lourios also called Apollonios	Before A.D. 99 to A.D. 132 or A.D. 146-7	SB 7559 (A.D. 99) P Tebt. II 527 (A.D. 101) P Mich. inv. 5589 (A.D. 104) P Fam. Tebt. 21 (A.D. 122) P Fam. Tebt. 23 (A.D. 123) P Fam. Tebt. 28 (A.D. 129) P Giss. inv. 255[a] (A.D. ...) P Fam. Tebt. 27 (A.D. 132) P.S.I. 1123 (A.D. 150)	Probably related to the family of Herakleides the Younger and Herakleides, son of Maron. He never used the title "nomographos."

TABLE 1 - Continued

Names	Dates	References		Remarks
Ptolemaios	ca. A.D. 146-7	P Tebt. II 524	(A.D. 146-7)	Possibly a temporary grapheion manager.
Achilleus, son of Apollonios	ca. A.D. 173	P.S.I. 1105 P Tebt. II 322	(A.D. 173) (A.D. 189)	Grandson of the grapheion official, Lourios Apollonios.
Apion	ca. A.D. 198	P Tebt. II 397	(A.D. 198)	Said to be "acting" grapheion clerk.

[a]E. Kornemann, "Elterliche Teilung fuer den Todesfall," Archiv 10 (1932), pp. 213-215.

Kronion's first remaining docket mentions his succession to the office upon his father's death. On September or November 15, A.D. 26, he wrote up a document for a lease of grain with the following signature[1]: ἀναγέγραπται διὰ Κρ[ονίωνος Χ] τοῦ τετελευκότος αὐτοῦ πα[τρός Ἀπίωνος τοῦ Χ] νομογράφος Τεβτύνεως. Although Kronion's patronmyic is lost in this line, there are other documents which prove that he was the son of Apion as in the salutation to a contract guaranteeing Kronion immunity[2]: Ἡρακλείδες [Ἡρακλείδου]/ Κρονίωνι Ἀπίωνος νομογράφωι/ Τεβτύνεως χαίρειν and a similar document[3] addresses him in a like manner.

Kronion probably learned his profession at his father's side. He had every opportunity to do so because the grapheion was located in his father's and later his house.[4] It is more reasonable to see Apion as Kronion's writing instructor rather than some other teacher, since writing was part of the nomographos' work and Apion would have taught all aspects of the duties of the office to his son. Kronion learned to write, during this apprenticeship, in a "medium-sized business hand with letters about 2 mm. high"[5] which is also described as a "practiced, although carelessly formed cursive."[6] As he grew more proficient in the work and as his father became

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1. P Mich. inv. 631, lines 37-39 published by E.M. Husselman, "Two New Documents," pp. 73-4.
2. P Mich. V, 353 line 1 - 3.
3. P Mich. V 354, line 1 - 2.
4. Husselman, "Two New Documents," p. 77.
5. P Mich. II 123, introduction, p. 87.
6. P Mich. II 122, introduction, p. 81.

older or more infirm, Kronion must have taken an increasingly active part in the operation of the grapheion.

After his father's death, Kronion became ὁ πρὸς τῷ γραφείῳ and later, after A.D. 37, nomographos. His house became the office where documents were prepared and stored, fees collected, accounts kept and his personal papers deposited. For nearly twenty years, Kronion was the sole manager of the writing bureau until in A.D. 45 he took on a partner (μέτοχος) named Eutychas (also called Eutycheides) who played a prominent role in the administration of the grapheion's finances.[1] We can only speculate on the reason for the partnership forming at this time, but A.D. 45 was a year in which all Tebtunites felt the effects of an overly high flood, a famine and, consequently, more straightened economic circumstances.[2] In light of the general hardship we can easily visualize the grapheion's expenses becoming a burden, forcing Kronion to attach himself to an "angel" or financial backer named Eutychas.

Kronion was the senior partner who did the writing. His hand has been recognized in the long accounts and registers as well as shorter documents, while Eutychas' hand has not been singled out and his name appears only once in a registration docket. A contract for a division of property[3] has the registration mark: ἀναγέγρ(απται) διὰ Εὐτυχείδ(ου) καὶ [Κρονίω(νος) τῶν πρὸς τῷ γρ(αφείῳ) Τεβτύνεως καὶ Κερκεσουχ(ων) Ὥρους. Κρονίων συνσεσημιῶμαι.

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1. P Mich. II 123, introduction, p. 94. The first reference for Eutychas is P Mich. II 123, recto VIII, 10.
2. Chapter 2 will cover this subject in detail.
3. P Tebt. III 383, lines 60-61.

The handwriting is not described but whoever wrote the docket also wrote the body of the contract and signed both names of the grapheion officials. The extra mention of Kronion at the end of the docket with the notation "I have read it" suggests either that Kronion was not the writer of the document or that the registration was not valid without his "signature" or without both "signatures" of the two officials. Eutychas, then, would be the "junior" and possibly the non-writing partner.

Another document from A.D. 46[1] has a registration docket with no name in it: ἀναγέγραπται διὰ τοῦ ἐν τῇ κωμῃ καὶ Κερκεσούχων Ὥρους γραφίου. Not only are the names of the officials missing, but even the name of the village (Tebtunis) which usually appears in conjunction with Kerkesoucha Orous. Documentary formalities are not always consistent and it is difficult to say why Eutychas appears in one docket and neither partner in another. In the first and especially the second centuries the nameless registration docket appears frequently. One of the explanations for this could be that there was no appointed nomographos at the time of the particular document and so the registration was then διὰ τοῦ γραφίου not διὰ τοῦ πρὸς τῷ γραφείῳ because the scribe on duty there had no official title.

Kronion's economic embarrassment eventually came to an end

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1. P Mich. V 322a.

and Eutychas resigned. The latest possible date for Eutychas' participation in the operation of the grapheion was A.D. 49.[1] After this year Kronion appears to have been alone in his post until at least A.D. 52[2] or A.D. 56 which is the date of the latest document in the archive. Kronion, son of Apion, was the nomographos for about thirty years.

After Kronion, the grapheion must have passed out of the control of his immediate family since the extant grapheion documents stop abruptly at A.D. 56 and do not reappear until the end of the first century. Eutychas may have taken over the office and duties of nomographos after Kronion, in which case his tenure as "junior" partner between A.D. 45 and A.D. 49 constituted a training period and all the preliminary notes and compilations extant in this archive were his educational materials.[3]

While Kronion's immediate successor is not revealed in any of the few late Julio-Claudian and Flavian papyri from Tebtunis, the nomographos of the beginning of second century is known. He is Lourios also called Apollonios, who began his era as nomographos of Tebtunis sometime before A.D. 99.

Lourios is an unusual name.[4] It is reasonable to assume that people with this unusual name are related to each other

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1. In P Mich. II 128 (A.D. 46-49), Eutychas is mentioned once. In P Mich. II 126 of the same period, he is not mentioned at all. 126 is in a fragmentary state, however.
2. P Mich. V 354. The later document, P Mich. V 335 (A.D. 56) contains no reference to Kronion.
3. Husselman, "Procedures," pp. 223-238.
4. Husselman, "Donationes," p. 153.

because names tend to be repeated in succeeding generations. While identification by name alone is always risky, the combination of double names, the dates of the documents and the provenance lend weight to Lourios' connection to the first century family of Herakleides the Younger and to the second century family of Herakleides and Herakleides Valerius, which was based in Tebtunis and later in the Hadrianic city of Antinoopolis.

Herakleides the Younger, son of Maron and Arsinoe,[1] was the patriarch of a large and wealthy family in Tebtunis during the first half of the first century. Herakleides and his wife, Ptolema, had eight children, six boys and two girls. The two sons who carried the family on, at least according to our records, were Herakleides Lourios and Maron, the former siring the family of Lourios Apollonios, the grapheion official, and the latter fathering the Herakleides clan of Tebtunis and Antinoopolis.

In his official capacity Lourios Apollonios executed a property declaration in the year A.D. 100-1 for Didymos, son of Herakleides called Lourios.[2] There is no sure identity of Herakleides Lourios in this document with the Herakleides Lourios of the early first century family, but it is unlikely that there would be two people in Tebtunis at the same time with the same rare name. The ages of the people in question aid this identification.

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1. P Mich. V, pp. 17-18.
2. Husselman, "Donationes," p. 153.

Herakleides the Younger was born about 9 B.C.;[1] his wife, Ptolema, about 3 B.C. The only one of their eight children for whom an age is found is their daughter Arsinoe, who was born around A.D. 17. Herakleides and Ptolema could have started their family around the year A.D. 14 (when Herakleides was about twenty-five and Ptolema about nineteen). Their children, the generation of Herakleides Lourios and Maron, would have become parents twenty to twenty-five years later around A.D. 34-39. Didymos would have been born around this time since he does seem to be advanced in age in A.D. 100-1.[2] The generation succeeding Didymos, born after A.D. 65 or 70, would be in the thirties to forty age group by A.D. 100-1. Lourios Apollonios, dead by A.D. 150,[3] was in this group. With the support of name and age and location, it is probable that Lourios Apollonios was closely related to Didymos either as a nephew or even as a son.[4]

Lourios had a long career of close to thirty-five years as "the man in charge of the grapheion." The earliest document with his registration docket is dated A.D. 99[5] and the latest is dated A.D. 132.[6] Between A.D. 132 and A.D. 150, Lourios died, leaving his widow Taotion, daughter of Ptolemaios, and at least one son,

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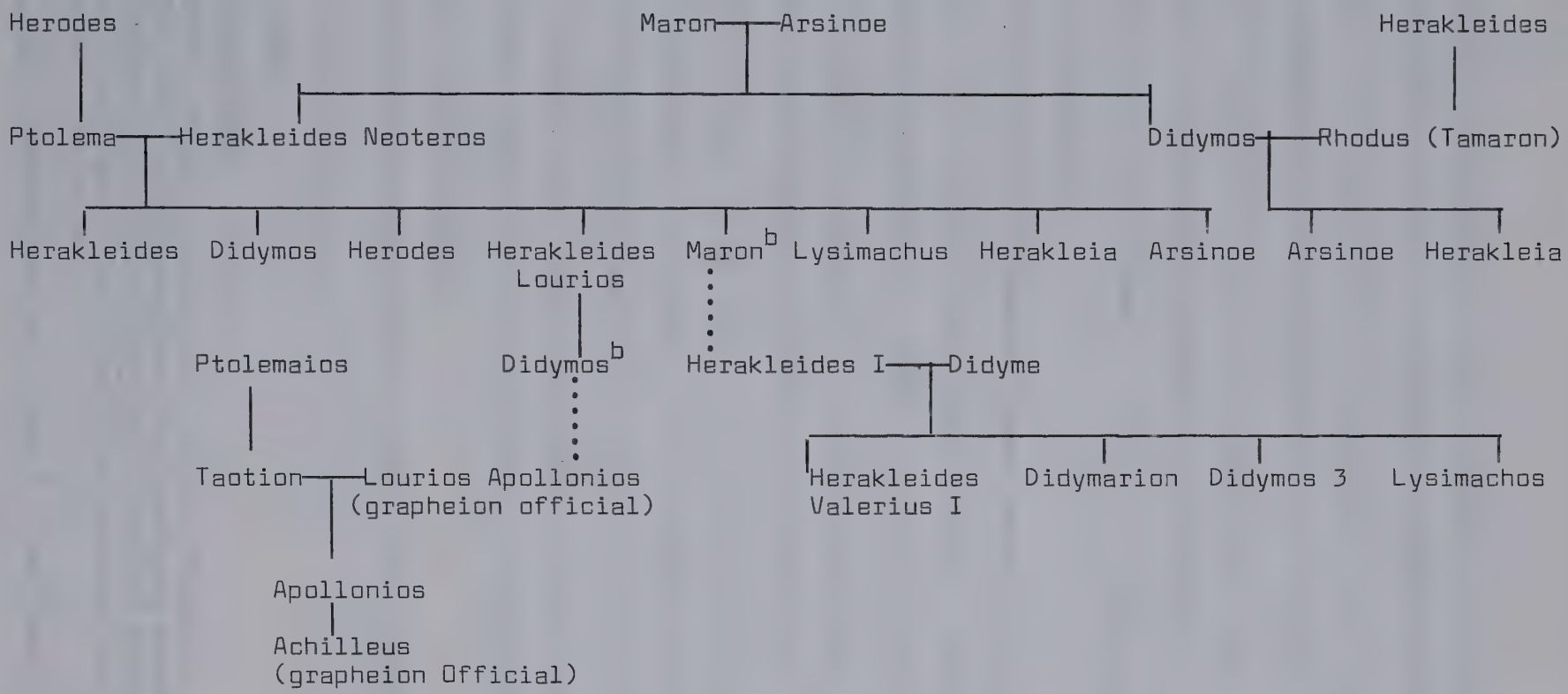
1. P Mich. V 350 gives the approximate ages of three members of the family in A.D. 37. See Chart I for the family stemma.
2. Husselman, "Donationes," pp. 152-4.
3. P.S.I. 1124.
4. Husselman, "Donationes," p. 154.
5. SB 7559.
6. P Fam. Tebt. 27.

CHART I: THE FAMILY CONNECTIONS[a] OF LOURIOS APOLLONIOS, GRAPHEION OFFICIAL



[a]This stemma is based on P Mich. V, p. 17, Table II and the stemma in P Fam. Tebt. n. p.

[b]The dotted lines indicate a conjectured connection.

Apollonios, who, in the year A.D. 150, applied for a lease.[1]

During his tenure as nomographos, Lourios Apollonios signed many dockets. The oddity about his dockets is that he never calls himself "nomographos" but always ὁ πρὸς τῷ γραφείῳ . The term "nomographos" may have fallen out of use by this time. Another oddity about the grapheion documents from his tenure is that many of them have no official's name at all, just "registered through the grapheion of Tebtunis."[2]

Many of Lourios' documents appear among those of the family of Herakleides (I) and his son Herakleides Valerius, the prominent second century Tebtunis family, part of which emigrated to the new city of Antinoopolis as members of the privileged group known as the "six thousand four hundred and seventy-five Hellenes."[3] The patriarch of this numerous clan, Herakleides, is the son of Maron, who is probably the son of Herakleides the Younger. Or, he could be the son of Maron, son of Herakleides the Elder, brother of Herakleides the Younger.[4] Lourios, was in any case, related to some members of this important family, who still kept their Tebtunis possessions even after removal to Antinoopolis.

It is interesting to note in passing that Herakleides Valerius

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1. P.S.I. 1124.
2. As in P Fam.Tebt. 7, 10, 29.
3. G. Plaumann, "Die ἐν Ἀρσινοίτηι ἄνδρες Ἕλληνες 6475," Archiv 6 (1920), pp. 176-183, describes this term as a second century A.D. status designation for the katoikoi of the new foundation Antinoopolis. Its broader significance is uncertain and goes beyond the subject of this work.
4. P Fam. Tebt. introduction, pp. 5 and 9. See Chart I.

was himself part of the archival system when he served as one of the two bibliophylakes in the bibliotheke demosion logon in the metropolis, Arsinoe, during the early years of Lourios' control of the grapheion. This would make him one of the superiors[1] of his cousin Lourios. Herakleides Valerius and his partner Patron seem to have gotten into some difficulty while keeping the public archives with the result that Herakleides Valerius renounced his birthright in A.D. 117 in order to be released from penalties incurred during his administration of the archives.[2]

Lourios died sometime between A.D. 132 and A.D. 150, but he was replaced as early as A.D. 146-7[3] by a man named Ptolemaios who had a new descriptive title: ἀσχολούμενος τὸ γραφεῖον. This means that he was either a temporary manager of the grapheion until a permanent notary could be found[4] or that he sub-let the post from the concessionaire, who, in turn, leased it from some undetermined government source.[5] After Ptolemaios, the grapheion was still active but its chief is not named in the surviving documents.[6]

There is no surviving document which shows that Apollonios, son of Lourios called Apollonios, was ever in charge of the grapheion.

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1. For a discussion of the position of the grapheion in the archival system in the Arsinoite nome, see below.
2. P Fam. Tebt. 18, 24.
3. P Tebt. II 524.
4. Von Woess, Urkundenwesen, p. 36.
5. P. Grenfell II 41, lines 2-3; Wilcken, Archiv 5 (1909), pp. 281-2; M. Chrest. 183, introduction.
6. P Tebt. II 390 (A.D. 167) and P.S.I. 1143 (A.D. 164) have a nameless docket which states that the documents were registered "through the grapheion of Tebtunis."

However, in A.D. 173 Achilleus, son of Apollonios, son of Apollonios called Lourios was the notary of Tebtunis.[1] It is not certain how long he continued in this capacity, but in A.D. 189 he was still alive and made a census declaration.[2] In the first century, Apion passed the grapheion and its duties on to his son, Kronion. More than a hundred years later, Lourios Apollonios passed on the office (with an intermediary or two) to his grandson, Achilleus.

The last nomographos of the second century, curiously, had the same name as the first nomographos of the first century--Apion. He was an "acting" (Ἀπίων διέπων τὰ κατὰ τὴν νο(μογραφίαν)) nomographos in A.D. 198.[3] Terminology did change slowly over the decades, so diepon may be equivalent to ascholoumenos and indicate that the position of notary was vacant or temporarily filled. At the end of the second century there may have been a difficulty in finding someone to lease the post due to the general decay in the administrative and economic systems[4] or due to another reason such as a delay until a family member who would "inherit" the job reached his majority.

Certainly, it is safe to say that the operation of the grapheion of Tebtunis tended to remain in certain families and to be carried on by one person for a long period of time. Kronion and Lourios both held the post for about a generation each. Whether this

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1. P.S.I. 1105.
2. P Tebt. II 322.
3. P Tebt. II 397, line 34.
4. Von Woess, Urkundenwesen, p. 36.

post bestowed great prestige on the holder in the town or whether it was a crushing burden cannot be told.

The Writing Business

The man in charge of the grapheion could not and did not handle the voluminous paper work of the bureau by himself. He tediously wrote out by hand the official reports of the contracts drawn up in the office, both the lists (anagraphai) and the abstracts (eiromena); he also had to draw up the contracts themselves and as many copies as there were people involved. He had to keep financial records for the office and for himself and, in Kronion's case, train a new partner by writing out dummy reports for the student to copy.[1] In addition, the grapheion had to work in two languages, Greek and Demotic, and deal with all the illiterates whose signatures or subscriptions were required on their contracts. This problem of illiteracy or semi-literacy necessitated the employment of a stand-in scribe who would write for the contracting party who did "not know his letters." There were then, two kinds of scribes working with Kronion, the scribes hired by the grapheion in special circumstances and the scribes hired by the illiterates to write for them occasionally.

The Grapheion Scribes

The temporary scribes appear in the expenditure entries of the grapheion accounts. These included the night clerks (νυκτο-

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1. The grapheion procedure is discussed below. Also, Husselman, "Procedures," pp. 223 - 228.

γράφοι) and the Demotic contract writers. The entries for the nyktographos[1] show that the office paid for the night clerk's oil and food, which suggests that he was on duty for several days at a time, albeit infrequently.[2] Presumably, Kronion paid him in money but this pay is not listed among the expenditures. The two partners hired the night clerk "on the night preceding the thirteenth," (of Tybi). Entries for his expenses begin on the twelfth of Tybi and continue through the sixteenth of the sixth year of Claudius. On the eighteenth there was another outlay of two obols to fill the night clerk's lamp. The next period of the night clerk's employment in the seventh year of Claudius, the grapheion operators paid four obols for oil.[3] Despite the fact that oil was the major listed expense for the nyktographos, he probably did not work all night, but just a few hours beyond sunset.

The night clerk worked for Kronion at the beginning of the second quadrimester of the sixth year (Tybi) and at the beginning of the first quadrimester of the seventh year of Claudius (Sebastos). He may have been hired to aid in the preparation of the quadrimester reports or to "catch up" when a busy season caused the usual personnel to fall behind as during the time of lease making at the turn of the year in the month of Sebastos.[4]

The other kind of scribe specifically mentioned in the accounts

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1. P Mich. II 123 verso II, 14-20; 23-24 and IX, 24.
2. P Mich. II, p. 161 notes 14 and 15.
3. P Mich. II 123 verso, IX 29.
4. For the leases, see Chapter 2. The nyktographos also worked for six days during a period of low lease volume.

is the writer of Demotic contracts. Kronion himself wrote both Greek and Demotic,[1] yet the need arose for an extra Demotic scribe. The first reference to such an employee is doubtful because there seems to be an error in the line.[2] It reads: Πανήσι Αἰγυπτίῳ γράφοντι and should read τὰ Αἰγυπτία γράφοντι. The error, however, is a minor one and so we count Panesis among the Demotic writers of the grapheion. Onnophris the Feather-Bearer is the other Demotic writer.[3] The title "Feather-Bearer" (Πτεροφόρος) indicates that Onnophris was a priest. One of the prerequisites for the priesthood was the ability to read the sacred books in the native language[4] and the ability to write would be particularly necessary for a feather-bearer, if indeed he was the temple scribe as supposed.[5] Onnophris was a common name among the Tebtunis priests and three particular priests with this name wrote extant documents: Onnophris, son of Psuphis; Onnophris, son of Marisouchos and Onnophris, son of Patunis.

Onnophris, son of Psuphis called Harpokration, was a member of a wealthy priestly family which figures in several documents in the archive.[6] The family consisted of Onnophris, his two brothers Psuphis and Psenkebkis (the latter died young), his two sisters

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1. P Mich. V 308, line 10 of the Demotic contract.
2. P Mich. II 123 verso, II, 25 (Tybi 21) and note 25.
3. P Mich. IX, 28.
4. Evans, "History of an Egyptian temple," p. 179.
5. Ibid., p. 190. The occupation of the feather-bearer is a much-debated subject with no certain conclusion.
6. As in P Mich. V 322a and 263.

Tamarres and Thaubastis and his parents Psuphis called Harpokration and Tetosiris called Dionysia. Many members of the family and their in-laws were literate. Onnophris and his younger brother Psuphis were literate (in Greek); his mother's kyrios, Marepsemis Kalamos, was literate; his sister Tamarres' husband, Marepsemis Kephalas; Dionysius, son of Maron, the guardian of his other sister, Thaubastis. Onnophris' son Psuphis married the daughter of another Marepsemis who was a scribe.[1] The evidence shows that they only wrote Greek, but some of the literates must have written Demotic if they were priests. Onnophris acted as scribe when he and his fellow priests wrote a complaint to the strategos about some of their property which had been damaged by tenants. Onnophris wrote the subscription on behalf of himself and nine other "hegoumenoi and grammateis of the nine priestly tribes."[2]

Onnophris, son of Marsisouchos, wrote the subscription to a sale of part of a house and courtyard about A.D. 37[3] and also wrote one of the signatures to a division of property made by Psuphis, the father of the preceding Onnophris.[4] He wrote for Tammares and her brother Psenkebkis, both children of Marisouchos.[5] This same

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1. P Mich. V pp. 17-18. See also the stemma for this family in the section on professional scribes, Chart III.
2. P Mich. V 226 (A.D. 37), lines 1-11 and 46-47.
3. P Mich. V 290 (A.D. 37).
4. P Mich. V 322a (A.D. 46).
5. Onnophris cannot be a brother of Tammarres and Psenkebkis despite the same patronymic, because there is a thirty year difference in their ages.

Onnophris was the hypographeus for a certain Orsenouphis in a residence contract.[1] The third Onnophris, son of Patunis, wrote the text of a Demotic receipt from the priests of Soknebtunis in A.D. 41-2.[2] Any of these three could have been Onnophris the Feather-Bearer who was hired by the grapheion to write Egyptian. Although Onnophris, son of Patunis, is the only one for whom we have evidence of literacy in Demotic, Onnophris, son of Psuphis is a good candidate too, because he was wealthy enough to buy the office of Feather-Bearer.[3] Another point in his favor is the fact that he wrote on behalf of the other priests in their complaint to the strategos.

A valid contract must be signed by the interested parties; however, many Tebtunites could neither write the sometimes long and circuitous subscriptions nor, often, even their own names. Consequently, they employed professional scribes to write their subscriptions for them. Some writing stand-ins (ὑπογραφεῖς) were not professionals because literate relatives could be pressed into service. Generally, however, during the first and second centuries A.D., a man employed a non-related scribe, while a woman had her kyrios sign for her unless he too were illiterate, with the result that they both had to hire a professional.[4]

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1. P Mich. II 121 recto, I, ii.
2. P Mich. V 343 and note 9, p. 334.
3. Evans, "History of an Egyptian temple," p. 275 . The position was bought in the second century.
4. R. Calderini, "Gli ἀγράμματοι " p. 30. If a man used a relative for his scribe, that relative was usually a son, brother or father. There is little corresponding data for women.

The main job, then, of the professional scribe was to write the subscriptions to contracts for illiterates or semi-literates. A professional can be distinguished from another literate by his reappearance in more than one document and on the basis of his relationship to the parties involved. If the scribe does not seem to be related to them, then he may be a professional. This last criterion is not a perfect one, since in many cases the relationships between the people are impossible to determine. A literate might also write for his own family and friends, and still be a professional at other times. There is no indication whether the scribes were "free-lance" or whether they were hired by the grapheion. There is also no evidence how or by whom the hypographeus was paid, but presumably, if he were "free-lance," the illiterate who hired him paid his fee. In many subscriptions, each party used and supplied his own scribe,[1] but occasionally a signatory acted in behalf of both.[2] There is no connection between contract types and the number of stand-in writers employed so there must have been other criteria, as the availability of scribes.[3] The subscriptions which the scribes drew out for the employers could range in length from "I, so and so, agree to the terms as stated above"[4] to almost complete repetitions of the contract.[5]

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1. Examples are P Mich. V 322a; 241, P Mich. II 121 recto II, ii and III, i.
2. P Mich. II 121 recto III, xiii are uncertain examples of this.
3. R. Calderini, "Gli ἀγράμματοι ," p. 21.
4. P Mich. V 311, the third and fourth subscriptions, for example.
5. An example is P Mich. V 306.

The short subscriptions, however, are less often the work of scribes than inexperienced writers who wanted to sign their names with as little effort as possible.[1] Sometimes, a semi-literate was vain enough or self-confident enough to write a long subscription himself as did Heron, son of Akousilaos, when he sold a small vineyard. The resulting subscription is in "a childish and ill-formed hand, and is more than usually full of errors of grammar and spelling."[2] Wisely, most "slow writers" (βραδέως γράφοντες) left the writing of long subscriptions to the scribes. All of the short scribal subscriptions on the other hand, are buyers' acknowledgments: "The sale was made to me as aforesaid."[3]

The body (σῶμα) of the contract was almost always written by an anonymous scribe, probably in the employ of the grapheion, if not Kronion himself. The subscriptions (ὑπογραφαί) were written by a different scribe who declared his part in the contract-making by the formula: Ἔγραφα ὑπὲρ τοῦ δεῖνα διὰ τὸ μὴ εἰδέναι αὐτὸν γράμματα or some variation of this.[4] At the end of the soma of a complete contract and also at the end of an abstract for the eiromenon, the formula usually was: ὑπογραφεὺς τοῦ μεμισθοκότος (or the like) Ὁρσεοῦς Παιποντῶτος ὡς (ἐτῶν)κβ οὐλ(ὴ) ἀντικνημίῳ

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1. Short subscriptions written by semi-literates or "slow writers": P Mich. V 252 (1st subscription), 288-9 (all four subscriptions), 318-19 (first two subscriptions), 336 (second subscription).
2. P Mich. V 274-5, introduction, p. 176.
3. P Mich. V 257, 259, 260-1, 263, 272, 273, 277, 290.
4. An example of one variation is in P Mich. V 346, lines 12-13. Cf. Calderini, "Gli ἀγράμματοι ," p. 17-20. The formula may be subjective or objective.

δεξίῳ .[1] The age and identifying marks of the scribe were given at this time as well.

The "anonymous" scribes who wrote the soma did not have to make any such declaration because they were not writing for someone else. Recognition of handwriting is the one way to differentiate the grapheion scribes from the "free-lance" professionals, but this is difficult if not often impossible to do. In the relatively few documents which have both soma and hypographe[2] the contract body was in every case written in a different hand from the subscription. This argues for the existence of grapheion clerks in the regular employ of the writing bureau, despite the lack of direct references to them in the accounts. Two clerks may even have served at the same time. From a comparison of the handwriting of P Mich. V 333 and its duplicate 334 the somata were drawn up by two different clerks and subscribed to on the same day by the parties involved. The inference is that the two copies were drawn up from dictation.[3] Psuphis, called Harpokration, father of Onnophris, the scribe of the priests, dictated a meriteia which reflects his peculiar grammar and colloquialisms.[4]

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1. P Mich. V 311, lines 24-5.
2. They are: P Mich. V 251, 259, 260-1, 263, 264-5, 311, 312, 313, 321, 322a, 324-5, 333-4, 338, 340, 341, 348, 350, 351. Inv. 1431 and 631 Husselman, "Two New Documents," 586, 587, (P Mich. Browne). P Mich. V 259 and 262 have a soma, but no subscriptions; 315 is a preliminary draft of a soma. P Mich. V 345 was never intended to have a soma, just a subscription and registration docket (introduction to 345 p. 339). Also P Tebt. II 383 and 388.
3. P Mich. V 333-4, introduction, p. 306, A.M. Harmon describes dictation in the registry of real property in YCS 4 (1934), pp. 157-160.
4. P Mich. V 322a and introduction, p. 266.

Who were the professional scribes of Tebtunis and what sort of social and economic background did they have? Of the seventy-seven different signatories appearing in the documents from A.D. 7 to A.D. 56, twelve of these appear more than once and fit the criteria for professionals. Twenty of the seventy-seven are found in the abstracts of the eiromenon of A.D. 42 and of these, five appear more than once. There is not enough personal information on the sixty-five "stand-in writers" to discover much about them. They are listed in Table 2. Personal information can be found, however, for a few of the professional scribes who appear in the documents several times.[1]

The Scribes

Herodes, son of Herodes, was the earliest scribe whose activity extended from A.D. 13 to about A.D. 30. He acted as signatory in five extant documents which illustrate the variety of contracts which the scribe could be hired to work on. In A.D. 13[2] he was the writing stand-in for Orsenouphis Psosneus, son of Kalales, an illiterate weaver who, in this apprentice contract, agreed to teach the slave girl of Herakleon his trade. Herakleon, one of the few Tebtunites to own a slave, was literate and wrote a short subscription for himself.

At some time in the early first century, probably in the reign of Tiberius, Herodes wrote for all four of the children of Papontos, including the husband of one of the doughters in a subscription to

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1. See Table 3.
2. P Mich. V 346a is one of the earliest documents.

TABLE 2

THE "STAND-IN" WRITERS OF TEBTUNIS

Name[a]	Reference	Comments and Date
Onnophris,[b] son of Psuphis	P Mich. V 226	A.D. 37, Priest.
Apion, the Nomographos	P Mich. V 233	A.D. 25. Acts as a "stand-in" writer.
Diodoros, son of Psenobastis	P Mich. V 241	A.D. 16.
Orsenouphis, son of Horos	P Mich. V 244	Reign of Tiberius.
Nikanor, son of Heliodorus	P Mich. V 244	Reign of Tiberius.
Papontos, son of Petesouchos	P Mich. V 249	A.D. 18.
Diodorus, son of Herakles	P Mich. V 250	A.D. 18.
Theon, son of Didymos	P Mich. V 251	A.D. 19.
Heliodorus, son of Apollonides	P Mich. V 251	A.D. 19.
Diodorus, son of Ptolemaios	P Mich. V 257	A.D. 30.
Ptolemaios, son of Akousilaos	P Mich. V 259	A.D. 33.
Kollouthos, son of Mieus	P Mich. V 259	A.D. 33.
Ischyrion, son of Patron	P Mich. V 260-1	A.D. 35.

TABLE 2 - Continued

THE "STAND-IN" WRITERS OF TEBTUNIS

Name[a]	Reference	Comments and Date
Herakles Orseus, son of Herodes	P Mich. V 260-1	A.D. 35.
Chales II, son of Chales called Tamas	P Mich. V 264-5	A.D. 37.
Sokrates, son of Sokrates	P Mich. V 267-8	A.D. 41-42.
Galates,[c] son of Didymos	P Mich. V 269-71	A.D. 42. Three other signatories are in this document too.
Heron, son of Diodorus	P Mich. V 272	A.D. 45-46.
Pompeios, son of Patron called Primos	P Mich. V 272	A.D. 45-46.
Maron, son of Chresimos	P Mich. V 273	A.D. 46.
Apollonios, son of Lysimachos	P Mich. V 273	A.D. 46.
Heron Sagatos, son of Haryotes	P Mich. V 277	First Century.
Lysimachos, son of Lysimachos[d]	P Mich. V 277	First Century.
Phemnasis, son of Phemnasis	P Mich. V 282	First Century.
Onnophris, son of Marisouchos	P Mich. V 290	First Century.
Patron, son of Heron	P Mich. V 290	First Century.
Orseus, son of Orses	P Mich. V 298	First Century.

TABLE 2– Continued

THE "STAND-IN" WRITERS OF TEBTUNIS

Name[a]	Reference	Comments and Date
Harmiysis, son of	P Mich. V 300	First Century.
Kronion, son of Haryotes	P Mich. V 304	First Century.
Kronion, son of Annios	P Mich. V 309	First Century.
Kronion, son of Telephos	P Mich. V 310	c. A.D. 21.
Orseus, son of Papontos	P Mich. V 311	A.D. 34.
Dios, son of Dios	P Mich. V 312	A.D. 34.
Patunion, son of Diodorus	P Mich. V 316	First Century.
Marepsemis Kalamos, son of Marepsemis	P Mich. V 322a	A.D. 46. Related to family of Psuphis.
Patunion, son of Herakles	P Mich. V 328	First Century.
Onnophris, son of Patunis	P Mich. V 342	A.D. 41 or 42.
Maron, son of Euhemeros	P Mich. V 345	A.D. 7.
Eutychos, son of Maron	P Mich. V 348	A.D. 27.
Zoilos, son of Horion	P Mich. V 351	A.D. 37.
Meaeng[e], son of Kronion	P Mich. II 121 recto I, xiii	Age 38.

TABLE 2—Continued

THE "STAND-IN" WRITERS OF TEBTUNIS

Name[a]	Reference	Comments and Date
Apollonios	P Mich. II 121 recto II, ii	A.D. 42, Age 40.
Onnophris, son of Psosneus	P Mich. II 121 recto II, vi	Age 40.
Kronion, son of Haryotes	P Mich. II 121 recto II, x	Age 47.
Herakleides, son of Horion	P Mich. II 121 recto III, i	Age 60.
Polemon, son of Polemon	P Mich. II 121 recto III, iii, iv	Age 24.
Herodes, son of Herodes	P Mich. II 121 recto III, v	Age 35. May be the same as Herodes of P Mich. V 252.
Pasipos, son of Herakleides	P Mich. II 121 recto III, vi	Age 55.
Er( ), son of Ptolemaios (?)	P Mich. II 121 recto III, vii	Age 32.
Marepsemis	P Mich. II 121 recto III, viii	Age 30.
Diodoros, son of Pyrrhos	P Mich. II 121 recto III, xii	Age 40.
Soterichos, son of Herodes	P Mich. II 121 recto IV, i	Age 32.
Herodes, son of Eutychos	P Mich. II 121 recto IV, iii	Age 31.
Patunis	P Mich. II 121 recto IV, iv	Age 60. May be a party to contract.
Alkimos	P Mich. II 121 recto IV, vi	Age 30.

TABLE 2- Continued

THE "STAND-IN" WRITERS OF TEBTUNIS

Name[a]	Reference	Comments and Date
Leon, son of Orsenouphis	P Mich. II 121 recto IV, xi.	Age 32.
Diodoros, son of Ptolemaios	P Mich. Browne 586 P Mich. Browne 587	c. A.D. 30, c. A.D. 25-26.
Akousilaos, son of Heliodoros	P Tebt. II, 384	A.D. 10.
Lysimachos, son of Kronion	P Tebt. II, 388	A.D. 98.
Psoiphus, son of Onnophris	P Tebt. II, 383	A.D. 46. Related to family of Psuphis Harpocration.
Marepsemis Kaleos, son of Marepsemis	P Tebt. II, 383	A.D. 46.
Herakleides, son of Tryphon	P.S.I. 901	A.D. 46.
Galates, son of Didymos	P.S.I. 907	A.D. 42.
Haryotes, son of Eutychos	P.S.I. 909	A.D. 44.

[a]All of these men appear as scribes once.

[b]Onnophris appears once as a scribe, but elsewhere several times.

[c]This man spells his name "Garates."

[d]This Lysimachos may be the same as in P Mich. V 241, or he may be related to the family of Lysimachos, son of Didymos.

[e]This name is damaged.

TABLE 3

THE SCRIBES OF TEBTUNIS

Name[a]	Reference	Comments and Date
Herodes, son of Herodes	P Mich. V 252; 257; 293; 348; 346a.	He was also a lessee on a katoikic plot. A.D. 13-A.D. 31.
Eutychos the Elder, son of Eutychos	P Mich. V 249, 253, 269, 291, 296, 305, 306, 308. P Mich.II 121 recto, I, iv; II, vii; IV, i; IV, ix; x.[b]	He had three brothers owned land. A.D. 18-A.D. 42.
Dionysius, son of Maron	P Mich. V 278-9; 307; 322a; 336; 352.	Related to the family of Psuphis Harpokration. A.D. 27-A.D. 46.
Marepsemis, son of Marepsemis (the Lesones)	P Mich. V 263; 301-302; 308; 314; 349[b].	Related to a priestly family. A.D. 30-A.D. 35.
Melantas, son of Kronion	P Mich. V 269; 318.	A.D. 40-A.D. 42.
Menemachos, son of Alexander	P Mich. V 305; 321.	c.A.D. 42.
Sarapion, son of Ptolemaios	P Mich. V 332; 333; 335; 355.	Contributor to guild Harpokrates. A.D. 48-A.D. 56.
Onnophris, son of Pakebkis	P Mich. II 121 recto I, xiv; II, i, ii; IV, viii.	Age ranges from 30 - 39.
Ptolemaios, son of Chairemon	P Mich. II 121 recto I, x[b] II, viii; III, i, ii, ix, x, xi, xiii, xiv. P.S.I. 907 P Mich. V 232, 269-71.	Age ranges from 72-75. Related to Lysimachos family. He was guardian of Taorses, widow of Galates.

TABLE 3 – Continued

THE SCRIBES OF TEBTUNIS

Name[a]	Reference	Comments and Date
Ptolemon, son of Ptolemon	P Mich. II 121 recto III, iii, iv.	Age 24. His name is also spelled Polemon.
Onnophris, son of Marisouchos	P Mich. II 121 recto I, ii; P Mich. V 322a.	Aged 50-55.
Harmiysis, son of Orseus	P Mich. II 121 recto I, xi; II, v; IV, v, xii. P Mich. V 313; P.S.I. 915.	Secretary of public cultivators. Age ranges from 40-55.
Lysimachos, son of Lysimachos	P Mich. V 241	A.D. 16. He appears in three out of four abstracts in this eiromenon.

[a]These scribes all appear more than once as "professionals."

[b]Conjectured.

a contract for the sale of a house and courtyard.[1] Sometimes multiple parties to a contract signed separately with or without the help of a professional,[2] but here the four children and the husband signed through Herodes as a group. The last year of Apion's tenure as the man in charge of the grapheion saw Herodes writing a subscription for a cession of katoikic land for Apollonios and Didymos, sons of Apollonios.[3] The former was illiterate but the latter is described as "bradyteron graphin;" nevertheless, Didymos added his own short statement agreeing to the conditions of the cession. The "slow writers" (βραδέως γράφοντες) like Didymos had assorted talents. Some of them did not know all their letters, others knew only enough to write briefly, and some could not write because of infirmity.[4] It is interesting that Didymos, who is semi-literate, spells better than the buyer of the plot of land, Zenon, who indirectly professes to be literate by writing for himself.[5]

Two other documents show that Herodes was not dependent upon his skill in writing for a livelihood. In A.D. 30, Herodes wrote for Didyme and her husband, Harpyonsis, who sold part of their house.[6] Prior to this Herodes had gone into partnership with two men, Chairemon,

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1. P Mich. V 293.
2. As in P Mich. V 322a where various members of the family subscribe to the division of property, some in their own hands and others through a related or non-related scribe. See below for more information on this document and its personnel.
3. P Mich. V 252.
4. R. Calderini, "Gli ἀγράμματοι," pp. 34-6.
5. P Mich. V 252, note on lines 9-10.
6. P Mich. V 257.

son of Horos, and Patunis, son of Marepsemis. These men had leased forty arouras of katoikic land on which they were to grow grain.[1] Pabnebtunis, son of Petesis had borrowed twenty-six artabs of wheat and the three partners had persuaded him to join the partnership probably in order to work off the interest. Their lease was to run from the twelfth year of Tiberius for four years, that is, from A.D. 27 to A.D. 31. This contract of partnership, then, shows that Herodes, who wrote for himself and his two companions in this document, was a tenant farmer working out this four year lease when he wrote for Didyme and her husband in A.D. 30. Whatever remuneration Herodes received as a scribe was not his main source of income, since he was also a farmer.[2]

Eutychos the Elder, son of Eutychos, also served the two nomographoi, father and son. The documents in which he acted as scribe cover the period from A.D. 18 to about A.D. 42. There are also several documents extant that concern the business dealings of Eutychos and members of his family from which we can gather much personal information about the social and economic standing of a literate man and part-time scribe in Tebtunis.

Eutychos the Elder was the oldest son of Eutychos and Thermouthis, daughter of Marepsemis and Demarion. He had four younger brothers: Eutychos II who died young, Eutychos III (tritos),

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1. P Mich. V 348.
2. P.S.I. 1130 (A.D. 25) may be another of Herodes' documents but the lack of patronymic and identifying marks makes sure identification impossible.

Sisichales and Sisois.[1] The four surviving sons were married: Eutychos the Elder was married to Tesenouphis, daughter of Harmiysis and Thermouthis; Eutychos III was married to Tamaron, daughter of Haryotes and Thasos, Sisichales had Heraklous, daughter of Aunes and Tasouchion as his wife and Sisois married a girl with the same name as his mother, Thermouthis, daughter of Sigeris and Taorseus. All of these appear in contracts of land transfer, either as buyers or sellers.

Eutychos the Elder owned many vacant lots and parts of houses. He bought part of a house from his mother, Thermouthis (whose kyrios was her son Eutychos the third), in A.D. 30,[2] and is mentioned as owning lots adjacent to some land which he purchased himself[3] and also to some purchased by someone else.[4] Part of his land was inherited from his father and part he bought for himself.

Two papyri in particular reveal the family's social and economic stratum. In one[5] Eutychos and his brothers and their wives sold walled vacant lots, inherited by them from their father, to Chrates, who owned other plots of land in the same area as these lots. Sisichales also owned lots adjacent to this parcel. The signatures on this document show the difference between the education of the

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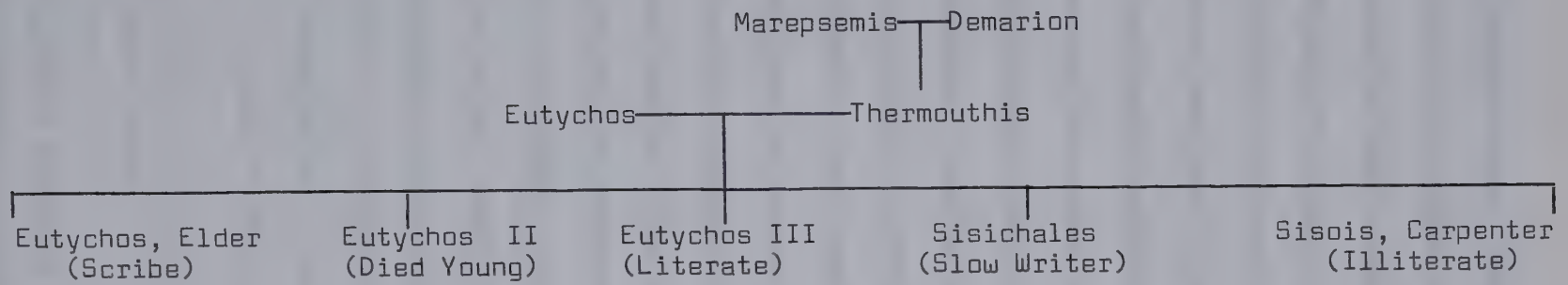
1. See Chart II for the family of Eutychos the Elder.
2. P Mich. V 253.
3. P Mich. V 308.
4. P Mich. V 269. His brother, Eutychos the third, owned a house adjoining his vacant lots (lines 16-17).
5. P Mich. V 305.

CHART II: THE FAMILY CONNECTIONS[a] OF EUTYCHOS THE ELDER, SCRIBE



[a]This stemma is based on P Mich. V, p. 19, Table IV.

older sons and the younger ones. Eutychos the Elder wrote the longest subscription for himself, his wife, and his brothers and their wives. Then each brother wrote a short subscription. Eutychos tritos was literate but Sisichales and Sisois, the two younger brothers, employed a scribe because "Sisichales writes slowly and the others (i.e. Sisois and the wives) are illiterate."[1] When the brothers were growing up either the family could afford to educate only the older boys or perhaps was only interested in educating the older boys. Sisois had not been introduced to the fine art of writing, but instead had been apprenticed to a carpenter, since he is always called "the carpenter" (οἰκοδόμος) in the documents.[2] Sisichales, his older brother, was semi-literate, the results of a rudimentary education. His other occupations are not known.

The answer to the question of why some members of the family were educated in the "liberal arts" while others were apprenticed, probably revolves around the status of the first born. At this time in the first century, the legal benefits of being the eldest seem to have been limited to certain cases of intestacy in inheritance.[3] In the Tebtunis meriteiai, merely a nod of recognition is given to the oldest son in the form of a slightly larger share of the property, but this is usually accompanied by a proportionally larger share of the responsibility for the care of the elderly parents.[4]

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1. P Mich. V 305 lines 22-23.
2. P Mich. V 244, 305.
3. A.M. Harmon, "Egyptian Property Returns," YCS 4 (1934), pp. 142-146.
4. For a further discussion of primogeniture in the Tebtunis papyri, please see the meriteia section in chapter III.

If, indeed, primogeniture did not confer great benefits upon Eutychos the Elder, then the reason behind the semi-literacy and illiteracy of half the family may be attributed to lack of money. In comparison with the other families, such as the sons of Herakleides the Younger and the sons of Psuphis called Harpokration who were all literate,[1] this family appears from the extant documents to hold less property, indicating perhaps a somewhat lower standard of living (which would include education of the children) than the others.

Eutychos' two younger brothers, Eutychos tritos and Sisois the carpenter, had other occupations which throw an interesting sidelight on the family's position in the village. Both brothers belonged to guilds; Sisois was a member of a group of twenty-four apolysimoi (ἀπολύσιμοι) of an estate of the Emperor Claudius[2] and Eutychos was a member of an unnamed group, some members of which also belonged to the guild of apolysimoi with Sisois.[3]

The apolysimoi were local cultivators recruited to work on the imperial estates known as ousiai. These estates, scattered throughout the empire, were made up of abandoned or waste kleroi which had been confiscated by the state[4] and then parcelled out by the emperors, beginning with Augustus, to their relatives and friends. The ousiai seem to have had different varieties of workers

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1. P Mich. V 326 shows the literacy of the Herakleides family and P Mich. 322a shows the same for the Psuphis family.
2. P Mich. V 244.
3. P Mich. V 248.
4. Rostovtzeff, SEHRE, p. 672.

on them: hired laborers and artisans (kata paramonen),[1] lessees,[2] and the apolysimoi, who were induced to take over the cultivation of this land in exchange for some advantage, the nature of which has not yet been determined. They either were exempt from the poll tax,[3] or possibly the personal services required such as canal and dyke work, liturgies, and the like.[4] Another possibility for the character of this advantage is the ability of the apolysimoi to band together and choose an intermediary (their president or epimeletes) to collect the poll tax and pay it for them.[5]

In A.D. 43, Sisois was listed as a member of the guild of apolysimoi which was created as a mutual benefit society, providing for banquets, religious celebrations, funerals, bail for imprisoned members. The nature of Eutychos' society, however, is not known because of damage to the papyrus. He, too, was most likely an apolysimos of the emperor since generally the apolysimoi were related: brothers, sons, spouses.[6] An additional piece of evidence linking Eutychos tritos with apolysimoi is the fact that Sigeris, son of Pakebkis and Panesneus, son of Harmiysis are listed both as

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1. A. Tomsin, "Le recrutement de la main d'oeuvre dans les domaines privés de L'Égypte," Festschrift Oertel, p. 84.
2. A.C. Johnson, Roman Egypt, p. 79.
3. Préisigke, Woerterbuch, III, p. 203. F. Oertel, Die Liturgie, p. 95, note 1. However, the term "apolysimos tes ousias" on analogy with "apolysimos tes laographias" would mean "exemption from forced cultivation of ousiac lands" according to Tomsin, op. cit., p. 85.
4. P Mich. V 244 introduction, p. 101.
5. A. Tomsin, op. cit., pp. 86-7; P Mich. V 244 line 6.
6. A. Tomsin, op. cit., p. 84.

apolysimoi with Sisois and as members of Eutychos' guild,[1] There is another Eutychos, son of Eutychos listed with Sisois,[2] but since his age is given as thirty, while Sisois is thirty-eight, this Eutychos must be a different person with the same patronymic because Eutychos tritos was older, not younger than Sisois.[3]

Sisois and Eutychos tritos as apolysimoi were probably neither serfs nor forced cultivators on the imperial estate, because one does not use the incentives of persuasion when one is going to compel and the imperial bailiffs would not have been entrusted to confer any "advantage" upon forced cultivators. Their position as apolysimoi suggests that the family did not belong to the same village social stratum or economic group as, say the priestly family of Psuphis, alias Harpokration or the family of Herakleides the Younger,[4] but the family was comfortable enough to have two literate members and to own some parcels of land. Eutychos the Elder may have had more wealth than his brothers since he figures in more business transactions; nevertheless, it is still difficult to decide whether the money, if any, from his scribal duties supplemented his income or whether his scribal duties merely added the prestige of being literate to his village reputation with any pay a secondary consideration. In other words, was Eutychos the Elder a "professional scribe" or a

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1. Sigeris, son of Pakebkis: P Mich. V 244, line 25; P Mich. V 248 line 1. Panesneus, son of Harmiysis: 244, line 24; 248, line 5.
2. P Mich. V 244, line 32.
3. See below for a discussion of the ages of the brothers.
4. P Mich. V 322a and 326 respectively.

"gentleman-scribe?"

In his "professional" capacity Eutychos the Elder was a signatory in four documents which all happen to be sales of houses, parts of houses and vacant lots,[1] the same type of real property which Eutychos himself owned. Two of the documents[2] are certainly those of Eutychos the Elder because the distinguishing epithet is present. The other two[3] have been attributed to Eutychos on the basis of his handwriting, which is usually described as "somewhat irregular, in many places so cursive that individual letters cannot be distinguished,"[4] or "more cursive and careless than elsewhere."[5] The two disputed documents show Eutychos writing in a hand "sufficiently similar to make identification probable if not certain."[6]

In addition to these four documents Eutychos the Elder may have written five more documents recorded as abstracts in the eiromenon of A.D. 42.[7] The difficulty in connecting the scribe of the abstracts with the oldest son of Eutychos cannot be resolved by a study of handwriting, and the distinguishing epithet is never used. Other methods must be employed to try to connect the two men named Eutychos, son of Eutychos.

The abstracts usually record the name, age and identifying

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1. P Mich. V 249, 291, 296, 306.
2. P Mich. V 291 and 306.
3. P Mich. V 249, 296.
4. P Mich. V 305, introduction, p. 222.
5. P Mich. V 296, introduction, p. 207.
6. P Mich. V, introduction, p. 21.
7. P Mich. II 121 recto.

marks of the hypographeus, although sometimes these are lacking due to damage to the papyrus. All five of the Eutychos abstracts, however, do record his vital statistics, almost all of them different from each other. Table 4 summarizes these differences.

TABLE 4

THE SIGNALMENTS OF EUTYCHOS

Reference in P Mich. II 121 r	Age	Identifying Marks
1) I, iv	52	scar on right ankle
2) II, vii	30	scar on the middle of nose
3) IV, i	32	scar on right ankle
4) IV, ix	41	scar on right calf
5) IV, x	32	scar on right ankle

The third and fifth scribe are undoubtedly identical; the first scribe is probably the same man. His age differs because the writer of the eiromenon made a slip of fifty-two for thirty-two. How the second and fourth signalments fit this person is debatable. It is necessary, then, to estimate the approximate age of Eutychos the Elder to see whether he could be the writer of these abstracts.

None of the other documents in which Eutychos had a role gives his age or identifying marks, so we must approximate his age from that of his brothers Sisois and Eutychos tritos. In A.D. 43, the year after this eiromenon was written, Sisois was enrolled among the twenty-four apolysimoi of the Claudian ousia. In that year he was thirty-eight years old. Also among the apolysimoi were Sigeris,

son of Pakebkis, age twenty-nine, and Panesneus, son of Harmiysis, age thirty.[1] These are the two men who also appear in the undated guild membership list[2] in which Eutychos tritos was said to be fifty years old. At this time Sigeris and Panesneus were thirty-three years and thirty-two years respectively, which gives a date between A.D. 45-47 for the papyrus. If Eutychos tritos were fifty in A.D. 45-47, he was born between 5-3 B.C. Eutychos the Elder had to be at least two or three years older than Eutychos tritos, born between 8-6 B.C., because the second Eutychos was born between them. The eiromenon, P Mich. II 121 was written in A.D. 42 when Eutychos the Elder was approximately forty-eight to fifty years old. His age, then, is closer to the first and fourth signalments.[3]

The identifying marks and ages of the people in contracts are notoriously inconsistent.[4] It is easy to imagine a grapheion scribe estimating ages and confusing a forty-year old with a fifty-year old, but the difference between thirty and fifty is too great to mistake unless the grapheion scribe also made a writing error. The scribe of the guild list could have taken a forty-year old Eutychos tritos as fifty, the age given in the list, but most members of the apolysimoi groups represented in the papyri are under forty[5] and he could be younger. Both the approximations of his age and that of his brother

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1. P Mich. V 244 line 25 (Sigeris), line 24 (Panesneus).
2. P Mich. V 248 line 1 (Sigeris), line 4 (Panesneus).
3. Table 4.
4. P Mich. II 121 recto, note on IV, xii, p. 77.
5. P Mich. V 244 introduction, p. 101.

would have to be revised downward, if this were true.

There is another Eutychos, son of Eutychos, who was listed with Sisois on the guild list of A.D. 43, at which time he was thirty years old. In the second signatures of the members, Eutychos, apolysimos, apparently had an alias, which is lost ([..].πεου).[1] His grandfather's name was also given in another place,[2] but is unfortunately lost. It has been said that "it is improbable that two persons of the same name and patronymic should present themselves as signatories at the same village grapheion,"[3] nevertheless it is possible that the Eutychos of the guild list could be matched with the man of the same name and approximate age in the eiromenon. Some names are very popular in Tebtunis;[4] Eutychos is one of them. There could be two scribes with the same name and patronymic: Eutychos the Elder and Eutychos tritos both were literate. The thirty-year old Eutychos, son of Eutychos could even be the son of Eutychos the Elder and thus have carried the writing business into the next generation.

One further identity might be imposed upon Eutychos. He could be the man who became Kronion's partner in the grapheion in A.D. 45. The grapheion partner's name, however, is consistently spelled

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1. P Mich. V 244 line 46.
2. P Mich. V 244 line 32.
3. P Mich. II 121 recto IV, x, note, p. 77.
4. There are about twenty-five popular names, i.e. those which appear frequently in the texts of the Michigan papyri, as can be seen in a survey of the name indices of P Mich. II and V.

Eutychas (Εὐτυχᾶς), the short form of Eutycheides,[1] while Eutychos the Elder always spells his name Eutychos (Εὔτυχος). The partner, in fact, is called Eutycheides on one occasion.[2] Eutychas metochos never has a patronymic, unless the reference to Eutychas, son of Eutychos in Kronion's personal accounts[3] alludes to him.

Spelling variations and errors, shortened names, use of an alias, variation in ages and marks all contribute to the difficulty of matching one man with another in the papyri. The case of Eutychos, then, is typical and the irregularities in the descriptions of him may be due to the usual inconsistencies in such matters rather than to the existence of a number of men, perhaps related to one another, all literate and all writing at the grapheion. We cannot be sure that Eutychos the Elder, Eutychos tritos, Eutychos apolysimos, Eutychas metoxos are different people but we can be certain that Eutychos the Elder, son of Eutychos, was a landowner and a part-time scribe at the grapheion of Tebtunis.

Dionysios, son of Maron was a "professional" scribe in Tebtunis between A.D. 27 and 46.[4] He was related to the large, wealthy family of priests headed by Psuphis, alias Harpokration. When the patriarch and his wife divided their property in A.D. 46, Dionysios was kyrios for Thaubastis, the unmarried daughter of

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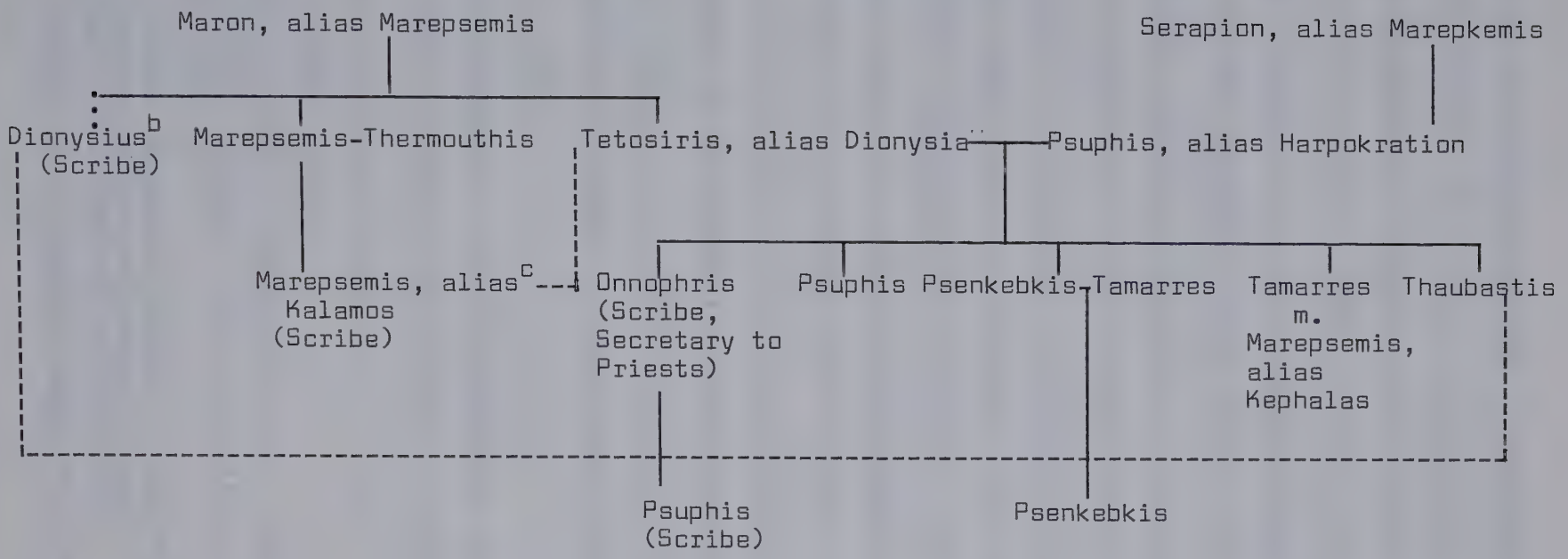
1. P Mich. II recto, 1b, 27. c,1; IV,25,27; IX,16,18,19,22; XI,28; verso, IIa, 1; III, 23,26,29,30,37; VI,19; VIII,10,39; XI,11 12,24,29,32. 124 recto, III,4,16. 125,9; 128, II,34.
2. P Tebt. II 383, line 60.
3. P Mich. II 127, I,49.
4. His documents are P Mich. V 278-9; 307; 322a; 336, 352. See Chart III for the relationships of this family.

CHART III: THE FAMILY CONNECTIONS[a] OF PSUPHIS ALIAS HARPOKRATION



[a]This stemma is based on P Mich. V p. 19, Table III.

[b]The dotted line indicates a conjectured connection.

[c]The broken line indicates a kyrios - relationship.

Psuphis and he is called her kinsman (προσγενής).[1] Dionysios may be Tetosiris' brother. His father was named Maron and hers was named Maron, alias Marepsemis. Her alias was Dionysia. Dionysios, therefore may be Thaubastis' uncle. Other scribes were related to this family. Onnophris, son of Marisouchos wrote for Tamarres and her husband in this meriteia and may also be their kinsman.[2] Psuphis, son of Onnophris, grandson of Psuphis, alias Harpokration wrote for himself in this document and for Patareis, son of Paopis, in the spring of the same year.[3] Marepsemis, alias Kalamos, son of Marepsemis was kyrios to his aunt, Tetosiris Dionysia. In the spring of the same year he had been hypographeus for Tamarres, daughter of Paopis.[4]

From the amount of property which Psuphis and his wife divided in this contract, it is obvious that they were in the upper class as well as a priestly family. The family members are literate, however, not just because of the connection between wealth and education, but also because literacy in the native language was a prerequisite for the priesthood[5] and literacy in Greek seems to have been a collateral talent in the family.

Finding Marepsemis, son of Marepsemis, in the literate family of Psuphis brings us back to the problem of connecting one man with

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1. P Mich. V 322a, line 45.
2. See above pp. 25-6 for Onnophris, son of Marsisouchos.
3. P Tebt. II 383. P Mich. V 322a was written in the fall of the same year, A.D. 46.
4. P Tebt. II 383, Marepsemis Kalamos is called Kaleos in 383. There is also a slight discrepancy in age; in the spring he was thirty-eight and in the fall he was forty.
5. Evans, "History of an Egyptian temple," p. 179.

another on the shaky foundation of name. There are two scribes named Marepsemis, son of Marepsemis who may be identical with the one in Psuphis' family or may be two entirely different people. Marepsemis is a common name in Tebtunis, so it is possible that two men with the same name could both be scribes or be the same man. One Marepsemis is the son of Marepsemis the Lesones, a priestly official with an undetermined function. According to P Amherst II, 35, the Lesones was director of sn̆. The editor of P Amherst suggests that at least in Ptolemaic times the Lesones was collector of the payment for the Lesoneias.[1]

The son of the Lesones had a distinctive enough handwriting for two of the five documents with a Marepsemis as scribe to be attributed to him on that basis alone. One is the subscription to a sale of a vacant lot (or building site)[2] and the other is a Demotic contract with Greek subscriptions for the sale of another vacant lot.[3] The Demotic section is said to have been written by Kronion, son of ?, the document scribe of Tebtunis[4] and also by Marepsemis, son of Marepsemis who is called Chresimos.[5] This document has been ascribed to Marepsemis, son of the Lesones by handwriting, but he is called only Marepsemis, son of Marepsemis in the Greek section despite the addition of the alias in the Demotic part. It is not certain

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1. P Amherst, II 35, note, p. 82.
2. P Mich. V 301-2.
3. P Mich. V 308.
4. P Mich.V 308, line 10 of the Demotic text.
5. P Mich. V 308, line 11 of the Demotic text.

whether he or Kronion write the Demotic text or whether the "written by..." statements refer to the subscriptions alone. Two other documents were written by the son of the Lesones, since he is so called in them.[1]

Marepsemis, son of Marepsemis was a hegoumenos of the priests of the god Kronos, for whom Onnophris, son of Psuphis, acted as scribe.[2] As usual with priests, Marepsemis owned a parcel of sacred land which, in this case, was adjacent to the plot sold in a transaction in which Marepsemis was a signatory for the buyer.[3] His position among the priests of Tebtunis makes the connection between him and the son of the Lesones very likely, but not certain.

There were three other scribes: Melantas, son of Kronion,[4] Menemachos, son of Alexander,[5] both of whom wrote in Kronion's second decade of office, and Sarapion, son of Ptolemaios who wrote at the end of his tenure.[6] Sarapion may be identified with a scribe called Sarapas on the basis of handwriting. The shortened name is a common phenomenon in the Michigan texts. Sarapion, in addition to his scribal duties, was a contributor to the guild of Harpokrates.[7]

Another set of signatories are found in the eiromenon of A.D. 42.[8] The abstracts in the eiromenon contain a usually brief

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1. P Mich. V 314 and 349.
2. P Mich. V 226.
3. P Mich. V 263.
4. P Mich. V 269, 318.
5. P Mich. V 305, 321.
6. P Mich. V 332, 333, 335, 355.
7. P Mich. V 246.
8. P Mich. II 121 recto.

distillation of the main points of the contracts without the grapheion docket, date, and subscriptions. The hypographeis are named in most cases. There are fifty abstracts in which ninety-seven people were involved as parties of the first or second part; sixty-seven of these used a scribe.

Among the twenty different scribes in the eiromenon abstracts there are some familiar names and some are new ones. Onnophris, son of Marisouchos[1] and Eutychos, son of Eutychos[2] have already appeared. There are three other scribes who wrote a variety of documents: Onnophris, son of Pakebkis, Harmiysis, son of Orseus and Ptolemaios, son of Chairemon. The activities of these three men illustrate the frequency of some scribes' appearances at the grapheion.

Onnophris, son of Pakebkis was hypographeus to Akousilaos, son of Kastor and to Eutychos and his mother, Tamarron, in two different leases made by these same parties on Pachon 16, A.D. 42.[3] He was also one of the signatories to an alimentary contract on the same day, and later on Pachon 26 he wrote for either Hermias, son of Cheos or Soterichos, son of Kronides when they entered into a paramone contract.[4] In these four abstracts Onnophris has the same scar on his right knee as a distinguishing mark, but his age is not always the same. He is thirty-nine in the first lease, thirty in the second lease,

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1. P Mich. II 121 recto I, ii.
2. P Mich. II 121 recto I, iv; II, vii; IV, i, ix, x.
3. P Mich. II 121 recto I, xiv; II, i.
4. P Mich. II 121 recto IV, viii.

and thirty-two in both the alimentary contract and work contract.

Ptolemaios, son of Chairemon is another scribe with regular signalments; he is always age seventy-two or five with a scar on his left elbow. If his distinguishing marks are the most consistent of the group, it is probably because he was one of the best known scribes in the village. He certainly was the most prolific, having written eight of the originals for the abstracts in the last four months of A.D. 42.[1] Four out of the abstracts in which Ptolemaios appears as signatory were entered on Pachon 25.[2] A fifth[3] was omitted from the anagraphe but was probably also entered on the twenty-fifth because the next abstract has an entry for the twenty-sixth of the month. The large number of documents written by Ptolemaios on the same day suggests that he was "resident scribe" on that day. He was related to one of the wealthy families in Tebtunis, that of Lysimachos, son of Didymos. Taorses, widow of Lysimachos' oldest son, Galates, had her kinsman Ptolemaios as her guardian.[4]

Harmiysis, son of Orseus was a grammateus georgon as well as a scribe and the extant abstracts show him in both these capacities. He acted as scribe for someone who bought a donkey;[5] and also on two occasions for a man named Orseus who leased land.[6] This Orseus is

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1. P Mich. II 121 recto II, viii; III, i, ii, ix, x, xi, xiii, xiv.
2. P Mich. II 121 recto III, ix, x, xi, xiii.
3. P Mich. II 121 recto III, xiv.
4. P Mich. V 232; introduction, pp. 16-17 for family of Lysimachos.
5. P Mich. II 121 recto, I, xi.
6. P Mich. II 121 recto II, v; IV, v.

said to be age twenty-nine in both cases, which makes it likely that it is the same Orseus.[1] With the similarity in patronymics, Orseus might be Harmiysis' brother, in which case Harmiysis would not be "professional." But Harmiysis is said to be between forty and fifty-six which makes him too old to be Orseus' brother. His professional status then is not jeopardized.

Harmiysis was secretary to the organization of public cultivators in Tebtunis. In A.D. 37, the six Elders of the group leased a half share of the so-called "marsh of the god" to Herakleides, son of Didymos.[2] In A.D. 42 five elders of the cultivators and the secretary rented to two cattle graziers (προβατοκτονοτρόφοι) half of the dry pasture lands of the village which these cultivators controlled.[3] In the two documents the elder's names are different, but the secretary remained the same over a five-year period because a skillful writer would be hard to replace from among the peasants of the town.

These are the main scribes of the last four months of A.D. 42; one further scribe remains: Lysimachos, son of Lysimachos, who wrote several of the subscriptions to the four documents whose abstracts appear in a short eiromenon for the year A.D. 16.[4] This Lysimachos,

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1. P Mich. II 121 recto IV, v. Orseus' patronymic is spelled in its alternate form, Orses. Spelling is as inconsistent as signalment and does not mean that the person is different.

2. P Mich. V 313.

3. P Mich. II 121 recto IV, xii. The gr(ammateis) of this abstract are really pr(esbyteroi) according to P Mich. V 313, introduction, p. 249.

4. P Mich. V 241. The signatory for the party of the second part in the second abstract is Psenbaustis and in the third it is "the same signatories."

son of Lysimachos cannot be the same as Lysimachos, son of Lysimachos, fifth child in the large, wealthy family of Lysimachos, son of Didymos whose kinsman was Ptolemaios, son of Chairemon.[1] Lysimachos the scribe was twenty-two in A.D. 16, while Lysimachos, grandson of Didymos would have been seven, since he was about twenty-eight in A.D. 37.[2]

Lysimachos, son of Lysimachos is said to be a "grapheion clerk,"[3] because he was at the grapheion for a continuous amount of time in which he wrote for several different people. This may also be true of Eutychos, son of Eutychos and Ptolemaios, son of Chairemon who wrote several subscriptions in one day. These men and others like them may have been employed either as "resident subscription writer" for the day or they may have been regular clerks at the grapheion who filled in as signatories when contracting parties neglected to bring along their own literate friend, relative or employee.

Lysimachos and Ptolemaios are on the opposite ends of the age range for the scribes of Tebtunis. Most of the scribes for whom ages are given were between the ages of thirty and fifty. There is only one scribe between the ages of twenty and thirty (Lysimachos); eleven between thirty-one and forty; six between forty-one and fifty; four between fifty-one and sixty; two are between sixty-one and seventy and one (Chairemon) is over seventy.

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1. For the family of Lysimachos, P Mich. V introduction, pp. 16-17 and for Ptolemaios see above.
2. P Mich. V 350.
3. P Mich. V 241, note on line 13.

Summary

An illiterate Tebtunite, entering upon a contract, was forced to hire a scribe if he had no relative to write for him. He took his chances whether his scribe was good and could write with a minimum of errors or whether the reverse was true.[1] But Tebtunis was a small town and it would be likely that the names of the better scribes would be well known and possibly they would be more expensive, if indeed, the contracting parties paid their hypographeis, rather than the grapheion. Sometimes the parties came unprepared for subscription writing and the nomographos would have to step in and act as hypographeus,[2] or one of the grapheion clerks would do the writing.

Only part of the town's population entered into contracts in any given year and those who did, seem to be named more than once. This group would be familiar with the contracting procedure and also know the best signatory. None of the scribes seem to have "specialized" in a particular type of contract, however. Everybody who writes more than one subscription writes them for different types of contracts. The one possible exception to this is Eutychos, son of Eutychos, whose output as a professional scribe is limited in the extant papyri to sales of houses and vacant lots.

Some scribes were busy, as can be seen from the eiromenon of A.D. 42, where a few men wrote many subscriptions. The busiest and therefore, the best represented in the extant documents were usually landowners themselves, some of them apparently quite wealthy.

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1. Calderini, "Gli ἀγράμματοι," p. 32.
2. Apion acted as a hypographeus in P Mich. V 233, for example.

Some of the scribes also held some official position which made use of their writing talents such as secretary to the public cultivators and "Feather Bearer" to the priests of the god Sobek. A few of the scribes were connected to prominent families in which many or all male members of the clan were literate as in the Herakleides family and the Psuphis family. There is a connection, then, between wealth and literacy, with the less affluent families educating only the oldest sons and perhaps apprenticing the others. Most of the scribes of Tebtunis were "gentlemen" scribes who did not depend upon writing as their sole source of livelihood, but had other occupations and incomes as well.

Other Writing Officials

Kronion, the nomographos, was just one man in the vast army of Egyptian officials and bureaucrats who produced tons of used and reused papyrus per year in their campaign to keep the government running. On the local level, Kronion was joined in this campaign and consumption of papyrus by various officials such as the monographos, the komogrammateus and the other nomographos who occasionally came in from the metropolis to inspect the outpost.

Literate priests could prepare Demotic contracts on a semi-official basis, but there was a special official, the monographos, who acted as Demotic notary in the village.[1] He was an official that appeared under the Ptolemies and still functioned in the early Roman

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1. Preisigke, Girowesen, p. 425, note 3.

period. Kronion entertained the monographos, whose name was Lysas, on two occasions in Tybi A.D. 45-6 and Sebastos, A.D. 46-7.[1]

The komogrammateus held his post as a liturgy for about a year[2] in a village other than his own.[3] He was responsible for compiling lists of the village inhabitants and their property, both movable and immovable, and on the basis of these lists he levied taxes and liturgic duties.[4] A few of the men who held this post in Tebtunis are known for the first years of the first century A.D.

In A.D. 16, a man named Hermias wrote to Akousilaos, toparch of Tebtunis, on behalf of a friend of his, Soterichos, the stonemason. Soterichos was bothered by a neighbor who was encroaching upon his land and the toparch was supposed to help Soterichos in some way, as well as inform the komogrammateus, Lysimachos, about the problem.[5] After A.D. 16, in a list of persons who make payments in grain for rent and taxes, there is a Lysimachos, said to be ex-komogrammateus, who paid twelve artabs of wheat and ten and five-sixths artabs of barley on a ten-aroura holding.[6] Also on the list is Didymos, the current komogrammateus, who paid twenty-six and two-thirds artabs of wheat and other rents for a ten-aroura holding and some other pieces of land.[7] The two men seem to be kleruchs.

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1. P Mich. II 123 verso, II, 13; IX, 9.
2. N. Lewis, Compulsory Services, s.v.
3. P. Petaus, introduction, pp. 18-20.
4. F. Oertel, Die Liturgie, p. 157.
5. P Tebt. II 410.
6. P Tebt. II 346, line 3.
7. P Tebt. II 346, line 4.

In A.D. 41-2, there was another Didymos in this position. This Didymos is almost certainly to be identified with Didymos the Elder, son of Lysimachos because there is a docket on the reverse of a contract of cession which says: παρα(χώρησις) Διδύμ(ου) κομογρ(αμματέως). The document itself shows that it was Didymos the Elder, son of Lysimachos who bought the katoikic allotment.[1] This Didymos may be identical with the Didymos, current komogrammateus, in the taxing list of kleruchs, mentioned above. The kleruch list would then be dated to A,D. 41-2. Two other men on this list, Didymos and Haryotes, both sons of Lysimachos, could be brothers of the komogrammateus, if this identity is correct.[2] Didymos the Elder had two brothers by that name.[3]

The next komogrammateus was named Lysas, the shortened form of the name Lysimachos. He was the compiler of the taxing lists when Kronion and Eutychos put together the anagraphe of A.D. 45-6, in which he is named occasionally. He arranged for Marsisouchos and Peteeus to have a lease drawn up at the grapheion free of charge. His son, Didymos, bought some land or a vacant lot from Galates in that same year[5] and in the next year, A.D. 46-7, Lysas arranged for a lease of seven arouras of chortos by Pakebkis to Herakles to be drawn up at the grapheion free of charge.[6]

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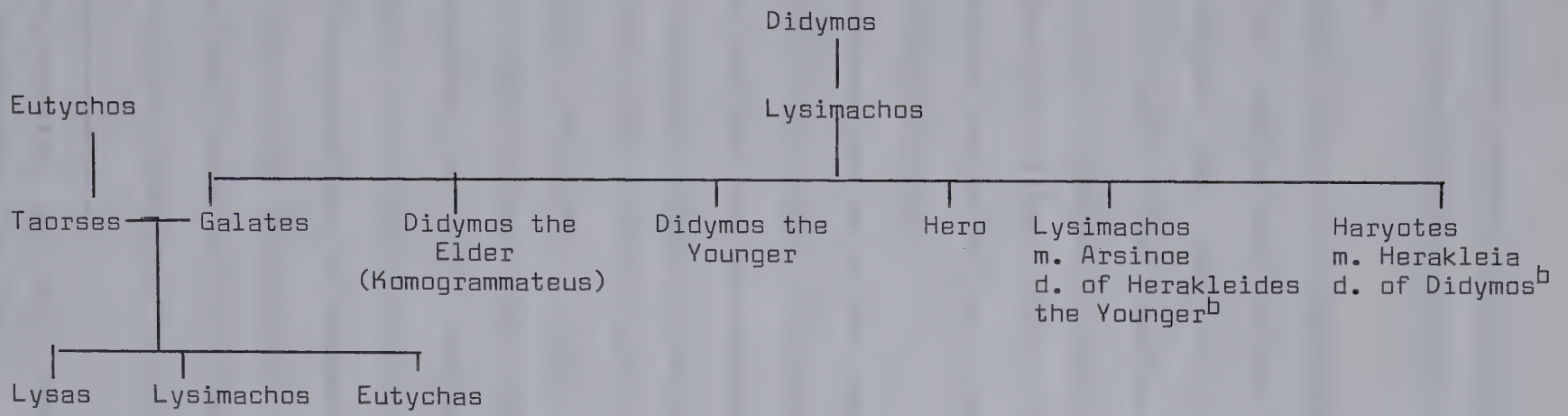
1. P Mich. V 267-8.
2. P Tebt. II 346, lines 17 and 19.
3. P Mich. V introduction, pp. 16-17. See Chart IV for family of Didymos.
4. P Mich. II 123 recto XX, 27.
5. P Mich. II 123 recto XXI, 30.
6. P Mich. V 240, l. 17. It is not clear from the statement " διὰ Λυσᾶτο(ς) κομο[γραμματέως] " whether Lysas had arranged for a remission of the grammatikon.

CHART IV: THE FAMILY CONNECTIONS[a] OF DIDYMOS, SON OF LYSIMACHOS



[a]This chart is based on P Mich. V p. 17, Table 1.

[b]See Chart I.

The grapheion partners seem to have written some documents for their friends free of charge and they extended this privilege to Lysas and his friends too.

After Lysas, the next komogrammateus on record is Areios, son of Lysimachos. Despite the fact that Lysas and Lysimachos are approximately the same name, there is no way to connect Areios to Lysas as a son, perhaps, or other relative. Lysas is consistently called that and never Lysimachos. There is also no proof that this liturgy was passed from father to son on any occasion, although the progression of names through the early years of the first century makes such a supposition tantalizing.

Another problem faces us in the form of Didymos the Elder, son of Lysimachos, in the role of komogrammateus. He was a resident and landowner in the town[1] and his occupation of this post would run counter to the usual practice of employing non-residents to hold a liturgy. His family was certainly wealthy enough to qualify for such a position, however, and perhaps an exception was made in his case for a reason such as difficulty in finding someone to take on the job. Or, the rules governing the job of komogrammateus may not have required a change of locality for Didymos in the first century A.D. as it did for Petaus, the komogrammateus of Ptolemais Hormou, in the second century A.D.[2] Whatever the relationship of Didymos and the village, the komogrammateus worked closely with the grapheion officials, whose work of drawing up contracts dealing with transfer of property had great

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1. P Mich. V, introduction, pp. 16-17; also, P Mich. V 267.
2. P. Petaus, introduction, pp. 18-20.

TABLE 5

THE KOMOGRAMMATEIS OF TEBTUNIS

Name	Date	Reference	Other Data
Lysimachos	A.D. 16 After A.D. 16	P Tebt. II 410 P Tebt. II 346	ex-komogrammateus and kleruch
Didymos	After A.D. 16	P Tebt. II 346	komogrammateus and kleruch
Didymos the Elder, son of Lysimachos	A.D. 41 - 2	P Mich. V 267 - 8	related to the family of Lysimachos, son of Didymos
Lysas	A.D. 45 - 46	P Mich. II 123 recto XX, 27; 128 II, 23; V, 240, 17	had a son named Didymos
Areios, son of Lysimachos	A.D. 50	P Tebt. II 229	....

interest for him. Table 5 summarizes the data about the komogrammateis.

The other official mentioned in the Tebtunis documents is a man named Heron or Heronas who was the nomographos of the metropolis, Arsinoe. He made several trips down to Tebtunis, possibly for the purpose of checking on the operation of the office there. The partners found it necessary to entertain the man with dinner and the resulting expenditures appear in their accounts.[1] Heron probably came to see how Kronion and Eutychos kept their records and ran their office. What he saw was not a model of efficiency.

1. P Mich. II 123 recto 1 (a), 18-21, (c) 3, (d) 4, 20-24; verso, V; 21 (?) VIII, 35-6.

Grapheion Procedure

The procedure of drawing up a document can be reconstructed from the extant papyri in the archive. Persons who intended to enter into a contract or who had already entered into a contract, but wanted it formally recorded came to the grapheion with the information necessary for writing it completely. The clerk of the grapheion, or perhaps, the nomographos himself drew up the soma using the details supplied by the parties on papyrus supplied by the office.

The contracting parties added their subscriptions or had their representatives, whether relative, "free-lance" scribe, or grapheion employee write for them. The nomographos added his docket which usually ran:

> "Registered by Kronion, the man in charge of the grapheion of Tebtunis and Kerkesoucha Orous."

At the time when the parties to the agreement drew up their subscriptions to the original documents, they also wrote subscriptions for their own personal copies (ἐκδόσιμα) on the lower part of the papyrus, leaving room for the soma to be written in later by the grapheion staff, using the original contract as a model. Some of the contracts were prepared in a different manner. When the subscription was a detailed restatement of the soma, the scribe later reconstructed the contract body from the subscriptions and the marginal notes he had made of ages and identifying marks of the parties before him. In other cases, the parties lacked some of the pertinent details for the contract body which made the scribe write up the document leaving blank spaces for whatever needed to be added. The parties then paid their fee: the grammatikon, the papyrus tax and possibly the signatory's wages. When

the whole process was complete, the ekdosima were issued to all the parties involved and the original was left in the grapheion.

The newly written document went through additional transformations. The original was glued into the tomos synkollesimos (τόμος συγκολλήσιμος), a roll composed of all the original documents registered in the grapheion.[1] Possibly, the transaction was recorded in a day book to facilitate the composition of the quadrimestrial anagraphe and the eiromenon. These two documents were prepared every four months, perhaps for the scrutiny of metropolitan officials.[2] Another anagraphe was prepared, probably at the end of the year, to record the fees paid to the grapheion by the contracting parties. In addition, special reports were sometimes required. One of the extant documents[3] covers the years A.D. 45-6 to 49 and it contains certain types of contracts only: cessions, mortgages of land, sales and other mortgages.

These were some of the methods of drawing up and registering the Greek contracts, but there was a slightly different method for producing the Demotic syngraphai which needed Greek subscriptions before registration. The parties either brought the completed Demotic syngraphai to the grapheion or had it prepared there by the staff.[4] During the Ptolemaic era the monographos composed the Demotic contract and until the appearance of the Michigan papyri, the latest evidence

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1. P Mich. V 260, 298, 310, 314, 349 have notes indicating that they were to be included in the tomos.
2. There is no direct evidence for a day book.
3. P Mich. II 122.
4. Segrè, "Note sul documento," p. 100.

for his existence was 75 B.C.[1] The grapheion accounts, however, show that the monographos and other "writers of Egyptian" were connected to the grapheion as late as A.D. 45-6 and would have participated in the preparation of these papers. It is more likely, therefore, that the whole syngraphe in both languages was more often written in the grapheion.

The Demotic contract has five parts: the Demotic contract itself, the Greek subscriptions, a Greek abstract of the Demotic original including eikonismoi, the date and the anagraphe of the grapheion. The copies which the concerned parties received were identical to this or were mere reproductions of the subscriptions.[2]

The Demotic contracts of the Michigan collection show some variation. The date and the Greek word ekdosimon begins the Demotic contract which is in two parts, sale and cession. The subjective subscriptions come next.[3] Another extant Demotic contract[4] has each part labeled antigraphon charagmatos, antigraphon hypographes, antigraphon alles hypographes, and antigraphon somatos. This last part is a copy of the abstract of the original Demotic contract which is different from the abstract type found in P Mich. II 121 verso in that it has the date of compilation, the place of registration, and the names of the interested parties at the end of the abstract.

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1. Ibid., note 3.
2. Ibid., pp. 100-1. Segrè uses P.S.I. 909 as the model.
3. P Mich. V 249 (A.D. 18) P Mich. V 250 has the eikonismoi written in the lower left-hand corner of the page and has the subscription of the buyer before that of the seller.
4. P Mich. V 251.

This abstract, like the eiromenon abstract, does have the description of the hypographeus, uses the same phrase to cover the omitted sections, and also lacks a registration docket.

Document preparation followed a prescribed method just as the contract itself followed a prescribed form. The bureaucracy could have run smoothly, that is, if these procedures and forms had actually been followed. The general opinion is that the procedure was far from orderly: "...it is possible that in the record office at Tebtunis the procedure with regard to contracts may have been laxer than it was elsewhere."[1] And also "...I P.S.I. (duplicates of the Michigan papyri) ...monstrano il disordine che regnava nei grapheia di Tebtunis e dell' Arsinoite in genere, nel periodo che va degli inizi della conquista romana sino forsè alla fine del 1 sec. d. Cr."[2]

The ideal procedure could have been reduced to a shambles, for example, during that time of year which was busiest, the last months of the old year and the first months of the new, when many people came to the grapheion to have their leases and other documents written up. The grapheion office, merely a room in Kronion's house, could have become quite crowded and noisy if many potential customers appeared at the same time. According to the evidence of the extant anagraphai, some days were very busy because the number of contracts entered for those dates is high.[3] Presumably, each party to the

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1. P Mich. V introduction, p. 11.
2. Segrè, "Note sul documento," p. 97.
3. Chapter two deals with business volume at the grapheion.

contract would be on hand, perhaps with a hypographeus in tow, to write the subscription after Kronion and his clerk had drawn up the main body of the agreement. The busiest day of the years represented by the extant anagraphai[1] was the thirtieth of Sebastos, A.D. 46[2] on which nineteen contracts of various types were drawn up at the grapheion. If each contract had the least number of involved parties, two, and two signatories, then during the space of one day seventy-six people passed through the writing bureau. This would leave behind thirty-eight subscriptions, many of which might need the contract bodies to be written in. Of course, some document types, as a division of property (meriteia) in a large family, might bring an elderly couple and many children, spouses and signatories into the office as well.

Kronion may be excused for the "confusion which reigned" in the grapheion during the busy times; however, there is no obvious reason why he could not have "caught up" on those days when there was no business at all, or during the months of the year which were low in business volume. Kronion, may then, be accused of negligence in allowing the build up of the duplicates[3] and bodyless subscriptions[4]

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1. P Mich. II 121, 123 and V 238 which cover the last four months of A.D. 42, the year A.D. 45-6, and the first four months of A.D. 46-7 respectively.
2. P Mich. V 238, lines 75-93; See Chapter two, Table 11.
3. The duplicates are: 254=255; 260=261; 264=265; 267=268; 269=270(incomplete)=271=PSI 907; 274=275(incomplete); 278=279; 283=284;285=286; 288=289; 291=292; 301=302; 318=319=320; 323=324=325=PSI 903(incomplete);329=330; 333=334; also PSI 902=355;905=252; 906=273;910=332;911=335;913=298; 914=307;916=309; 917=282.
4. The bodyless subscriptions are:252, 254-5; 256;257;258;267-8; 269-71; 272;273;274-5; 277;278-9;280;281;282;283-4;285-6;287; 288-9;290;291-2;293;294;295;296;297;298;299;300;301-2;303;304; 305;306;307; 309; 314; 316; 329-30(?); 332; 335; 336; 339; 341; 343; 344; 346; 349; 355.

which abound in the archive. Some of the bodyless subscriptions were stored and marked with dockets[1] to allow easy recognition when the staff had the time or inclination to pick them up again. Sometimes they may have been set aside, not because there was some more pressing business to do but because the writing fee had not been paid in full, or at all.[2]

There are two possible reasons for this collection of subscriptions in the grapheion. First of all, during the early Roman era when the new record keeping system was growing familiar to the populace, the demosioi chrematismoi (δημόσιοι χρηματισμοί) increased. The Ptolemaic system had dictated that privately held documents were valid and binding records of a transaction, while the Roman system encouraged the preservation of registered public documents in public archives, causing the privately held document to diminish in importance. The grapheion evidence shows that by the first half of the first century, A.D., the contracting parties did not consider having a personal copy essential as long as the original was registered in the grapheion.[3]

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1. An example is P Mich. V 274-5.
2. P Mich. V introduction, pp. 8-11. There are some entries in 123 recto in which Kronion indicated that the parties owed part or all of the fee, e.g. II, 31.
3. Von Woess, Urkundenwesen, p. 33. P Mich. V 334, for example, is a copy of the registered document 333. 334 has the name "Horion" written in large letters at the top of the text, but Horion never picked up his copy, although it was complete. However, Segre, "Note sul documento" p. 103 said: "l'antigraphon o ekdosimon del documento consegnato al destinatario veniva ad acquisitare cosi una parte preponderante rispetto all'originale..."

On the other hand, the people themselves may have desired their copies, but the disorder in the grapheion may have made it impossible for them to have ever received it. In fact, some of the subscriptions were never meant to be completed by the insertion of the soma because there is so little room left on the papyrus for it.[1] The text of the contract seems to have been less important than the registration docket and subscriptions. Some of the contracts have neither the docket nor room for the soma yet seem to be valid.[2] Since there are no analogous documents from other grapheia, it is impossible to say whether the accumulation of subscriptions was due to policy or negligence.

The Position of the Grapheion in the Archival System

The grapheion does not seem to have been an independent office. It had a connection to other grapheia in neighboring towns and to the metropolis. One relationship is revealed in five documents from Talei and Theogonis. The earliest papyrus is an antigraphon of the sale of vacant lots in Talei in which ὁ πρὸς τὸ γραφίωι Ταλεὶ καὶ ἄλλων κωμῶν is named Malchion.[3] In this document the word for "registered" is katakechoristai (κατακεχώρισται) whereas the words used in Tebtunis dockets for "registered" are either anagegraptai (ἀναγέγραπται) or epitetaktai (ἐπιτέτακται). This use of a different word may have been one of the idiosyncrasies of the Talei grapheion. A few years later in A.D. 34, Hermias was in

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1. P Mich. V 354 is an example.
2. P Mich. V introduction, p. 11.
3. P Mich. V 251, lines 22-5.

charge of the Talei grapheion. Two documents from that year, bearing his docket are extant.[1] The first is a lease of five arouras of public land near Theogonis. The second is a lease of a bath building in the vicinity of Theogonis owned by two Roman knights, M. Aponius Saturninus and T. Claudius Balbillus.[2]

The land and property mentioned in these two documents is near Theogonis; this suggests a close relationship of Talei and its record office to Theogonis. One of the "other villages" referred to in the dockets is indeed proved to be Theogonis by an undated first century Tebtunis document[3] which mentions γραφίωι Ταλὶ καὶ Θεογονίδος τῆς Πολέ[μωνος μερίδος] . It is possible that the record office with jurisdiction over more than one town was placed under the same official to simplify bookkeeping.[4]

There were close economic and cultural ties between the three towns: Talei, Theogonis and the center, Tebtunis.[5] This relationship also extended to administrative functions, a fact shown by the appearance of four documents, registered in the grapheion of Talei and Theogonis in the Tebtunis archive.[6] Generally, a contract was registered at the domicile of the creditor and not where the transferred

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1. P Mich. V 311 and 312.
2. P Mich. V 312, note on lines 7-8. Balbillus and Saturninus owned this estate together. Balbillus may be identical with the Prefect of Egypt of that name in A.D. 55 and one of the Alexandrian ambassadors to Claudius.
3. P Mich. V 287.
4. P. Koschaker, "Der Archidikastes" ZSSRA 28 (1907), p. 299.
5. Crotti, "Rapporti," pp. 104-108.
6. P Mich. V 251, 287, 311, 312. 287 is incomplete.

property was located.[1] In three of the documents, the land was located in Talei and Theogonis, while the bath was also in Theogonis. The home of the parties to the contracts is not mentioned, but if the transactions were registered in the Talei grapheion, they must have lived there. There is no reason, then, for these contracts to be in the Tebtunis group unless the grapheion of Talei and other villages was a branch of the larger one in Tebtunis.[2] The "other villages" probably refer to smaller ones around Talei, rather than Tebtunis and Kerkesoucha Orous. If "other villages" refers to Tebtunis, then the official in charge of the Talei office would also direct the one at Tebtunis.

Only a few things are revealed about the Talei grapheion in the documents. The length of tenure for the notary there seems to have been shorter than at Tebtunis. Malchion was in charge there in A.D. 19,[3] and Hermias held the post in A.D. 34.[4] In A.D. 45-6, Ptollas was either the grapheion official or a liaison man between the two offices because he received three allowances for food from the Tebtunis grapheion.[5] Although the Talei grapheion was connected to the one in Tebtunis, whoever drew up one of the first century documents learned his craft in Soknopaiou Nesos or elsewhere because

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1. P Oslo II 32, note on p. 70. Also Crotti, "Rapporti," p. 108.
2. P Mich. V 311, note on line 45. A.E.R. Boak's supposition.
3. P Mich. V 251.
4. P Mich. V 311, 312.
5. P Mich. II 123 recto (Ic) 7; verso VI, 18 and 37-8. Allowances for food were given to people who did official business for the grapheion.

the form and style of this document resembles that of C.P.R. I of the late first century A.D.[1]

Just as the Talei grapheion was a branch of the one in Tebtunis, so the Tebtunis grapheion must have been a branch of some other office in the metropolis. Kronion's bureau was part of the web of interrelated offices in the Arsinoite nome.[2] The direct and indirect evidence for the place of the Tebtunis archive in this "net" is sparse for the first century A.D. and ambiguous when it does exist at all. There are two things which could connect the grapheion to the metropolis and possibly, Alexandria: the diagraphe payments and the anagraphai.

The position of grapheion manager, whether as ὁ πρὸς τῷ γραφείῳ or as nomographos, was not liturgical, as can be seen from the duration of Kronion's tenure. It appears that this position was leased from some higher authority in exchange for monthly payments of "rent" called diagraphai. The main authority for the leasing of grapheia is P Grenf. II 41[3] and for the Tebtunis diagraphai payments is P Mich. 123 verso (the accounts).

P Grenf. II 41 is a sublease of a grapheion in Soknopaiou Nesos in A.D. 46 in which the (sub)lessee, Tesenouphis, son of Tesenouphis, promised to pay 288 drachmas including the side costs

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1. P Mich. V 287, introduction, p. 197.
2. P. Koschaker, "Der Archidikastes," ZSSRA 28 (1907), p. 299 "... bedeckte den arsinoitischen Gau ein ziemlich dichtes Netz von Archiven." Cf. Pierce, Grapheion, p. 68.
3. P Grenf. II 41 = M. Chrest. 183. Preisigke, Girowesen, pp. 411-413; U. Wilcken, "Referat," Archiv 5 (1909), pp. 281-2.

and receipt fees, as well as a lease gift of kerameia of wine.[1] Payments of the rent or something of the sort was to be made on the twenty-fifth of the month.[2] Three times a year, he further promised to forward to the leasing agency (or deposit with them)[3] all the documents in glued rolls (τόμοι συγκολλήσιμοι), an index (ἀναγραφή), and the eiromena (εἰρόμενα).[4]

According to the grapheion accounts[5] Kronion and his partner Eutychas paid the diagraphe monthly, either toward the end of the month for which it was due or early in the next month. The amount of the diagraphai varied from 112 drachmas[6] to 220 drachmas.[7] Sometimes the diagraphe was paid to Heron, an apparent resident of Arsinoe, who may possibly be Heronas the nomographos.[8]

What agency acted as lessor is not known. In the case of P Grenf. II 41, the agent was the original lessee of the grapheion and not some office in the metropolis. The original lessee would have been responsible for the ultimate destination of the documents which were promised by Tesenouphis. This would necessitate their being sent by the sublessee to the lessee who would then dispose of them further according to his regulations. P Grenf. II 41, if it is a

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1. P Grenf. II 41, lines 9-14.
2. P Grenf. II 41, lines 15-16.
3. The word taken to mean "deposit" or "forward to" (καταχωρίζω) is not defined for sure by any of the commentators.
4. P Grenf. II 41, lines 18-20.
5. P Mich. II 123 verso.
6. P Mich. II 123 verso Xi, 30.
7. P Mich. II 123 verso VII, 12-13.
8. P Mich. II 123 introduction, pp. 94-96.

sublease, cannot then, be taken as evidence for the tomos, the anagraphai, and the eiromena being sent on to some other depository. The destination of the documents which Kronion prepared is a matter under debate.

Kronion prepared at least two kinds of anagraphai: one represented by P Mich. II 121, which contains both an anagraphe and an eiromenon for four months, and the other by P Mich. II 123, which is an anagraphe for an entire year with the grammatika noted on the recto and the accounts of the office on the verso. Such mating of material cannot have been fortuitous; the two anagraphai must have had different purposes and, as a result, have been sent to different places: the 121-type document to a central depository and the 123-type document to an accounting division. The possible destinations which have been suggested are the agoranomeion, the bibliotheke and the Nanaion.

The agoranomeion was the notarial bureau in the metropolis as the grapheion was the notarial bureau of the village, so it has been thought that the grapheion was a branch of the agoranomeion.[1] During Kronion's time there was a nomographos in the metropolis to whom the partners paid the monthly diagraphai.[2] If there was a metropolitan nomographos, was there also a metropolitan grapheion? There was a grapheion in Arsinoe during the second century,[3] but

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1. M. Grund., pp. 59 and 61; Von Woess, Urkundenwesen, p. 35; P. Koschaker, "Der Archidikastes," ZSSRA 28 (1907), pp. 283, 304-5; P. Meyer, Jur. Pap. pp. 87-8; Pierce, "Grapheion," p. 69, note 5 declares the evidence too ambiguous for a decision.
2. P Mich. II 123 verso V, 21 and VIII, 35.
3. P Fam. Tebt. 7, lines 13-14.

there is no evidence for a first century office[1] unless the terms grapheion and agoranomeion were interchangeable at that time. This office, whatever its name, would have received the 123-type documents which recorded the monetary business of the writing bureau. If the diagraphe payments went to the nomographos of Arsinoe, then perhaps it is reasonable to suppose that the 123-type anagraphe and accounts went there as well. In that case, the agoranomeion would have had or been an accounting division,[2] unless the 123-type anagraphe was kept in the grapheion for inspection by the authorities.[3]

The other anagraphe, the 121-type document, could have gone to the bibliotheke enkteseon (Βιβλιοθήκη ἐγκτήσεων).[4] This office was the landed property register which received the property declarations of the inhabitants of the nome,[5] bank eiromena and diagraphai. The main purpose of the bibliotheke was to keep the land survey sheets which secured titles necessary for conveyance. Collections of contract abstracts like those found in 121 would be useful for this job. This bibliotheke would not have served Kronion's administration, but only his successors' because the earliest possible

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1. M. Grund. p. 59, note 5, gives two references for a metropolitan grapheion (Wessely, Wien. Sitzb. 153 and P London, 2) but not their dates.
2. M. Grund., p. 59.
3. Husselman, "Procedures," p. 231.
4. M. Grund., p. 63 uses the analogy of the bank eiromena and diagraphai, but analogies presuppose symmetries and similarities which may not have existed.
5. Harmon, "Egyptian Property Returns," pp. 157-187; Taubenschlag, Law[2], pp. 223-4.

date for its existence is A.D. 67.[1] Prior to this the demosia bibliotheke (δημοσία βιβλιοθήκη) was able to handle the volume of both public and private documents.[2] Around A.D. 72 the demosia bibliotheke was divided into two parts: the bibliotheke enktes·eon and the bibliotheke demosion logon.[3]

The demosia bibliotheke could have been the bureau to which Kronion sent the special report of "cessions and mortgages and sales and contracts of security"[4] encompassed by P Mich. 122 for the period from Sebastos of the sixth year of Claudius (A.D. 45-6) to the ninth year (A.D. 49). The existence of such a document argues for some sort of land registry office or department as its final destination.

One document which perhaps supplies evidence for the early simplicity of the business of documentation on the nome and village level is P Mich. V 232, a petition to the exegetes from Taorses, widow of Galates, and guardian of their three minor sons. The sons had, after their father's death, inherited a share of a katoikic allotment of eighty-two arouras which their father and uncles had mortgaged. This plot of land had been seized by creditors, leaving the boys and their uncles liable for the unpaid public charges. The exegetes authorized the clerk of the grapheion to

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1. B.G.U. 379 (=M. Chrest. 219). The bibliotheke demosion logon is the depository for public documents.
2. P. Meyer, Jur. Pap., pp. 88-9.
3. B.G.U. 379.
4. P Mich. II 122, lines 29-30. Cf. P Oxy. 237 (A.D. 89). The Decree of Mettius Rufus (lines 31-33) mentions the hypothekai among the kinds of property declarations that were wanted.

prepare the documents effecting the transfer of the katoikic land to the new owners so that the tax liability would end for the brothers and uncles.[1] This authorization was extraordinary because the bibliophylakes or keepers of the demosia bibliotheke were the usual authorities to whom such petitions were directed and from whom such authorizations came. Either the early date or the complexity of the problem accounts for the involvement of the exegetes and the village nomographos instead of the nome officials.[2]

The nome and central governments were mainly concerned with land, whether owned, mortgaged, bought, sold, leased or ceded. The archive of the central government was the Nanaion, located in Alexandria.[3] Upon request, one could obtain from this bibliotheke a copy (antigraphon) of a contract previously deposited there. In the early first century, however, the Nanaion may not have yet come into being or may not have been so named. The document which demonstrates that contracts were deposited in a bibliotheke during the reign of Augustus has no reference to either the Nanaion or Alexandria.

This document[4] came from the Fayum and is dated to A.D. 14-15. It preserves the complaint against two Egyptian notaries (συναλλαγματογράφοι) from Soknopaiou Nesos who did not deposit a Demotic contract of sale in the "library" as was their duty. When a search

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1. P Mich. V 232, lines 1-2.
2. P Mich. V 232 introduction, pp. 38-9.
3. Pierce, "Grapheion," p.75; P Fam. Tebt. 29, line 10; P Oxy. 34 (second century, A.D.).
4. Pierce, "Grapheion," p. 72; also SB 5232.

did not produce the document, their dereliction of duty was discovered.[1]

During the second century A.D. the Nanaion was joined in its function by the Hadrianic Library (Ἀδριανὴ βιβλιοθήκη) which was founded in A.D. 127. A copy of every public document (δημοσίος χρηματισμός) had to be sent to both these Alexandrian depositories.[2]

There are many pieces of evidence, none of which is conclusive, about the relationships of all the document offices in Egypt. Yet one other possibility remains for the destination of the documents which Kronion prepared. Since few complete documents have survived and there is no sign of a tomos anywhere in the archive, it is possible that the tomos synkollesimos of original documents was sent to the bibliotheke, while the anagraphe with the abstracts remained behind in the grapheion. In fifty years of administration by Apion and Kronion more than 50,000 documents would have piled up in that part of the house given to the grapheion, so it is more reasonable to conceive of the originals being sent on to the metropolis. The remaining anagraphai and eiromena would be used as indices.[3]

Kronion entertained many guests from the metropolis, both business associates like Heron (or Heronas) and emissaries. The archive, however, provides no clue as to the grapheion's relationship to Alexandria. If Kronion did send any documents to the country's capital, he may have done it through the officials in

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1. SB 5232, lines 30-35: Cf. Pierce, "Grapheion," p. 75; Von Woess, Urkundenwesen, p. 40, note 5, gives paragraph 100 of the Gnomon of the Idios Logos as additional proof of centralization. The Gnomon commanded the Egyptian notaries to deposit their documents in Alexandria.
2. P Oxy. 34.
3. Husselman, "Procedures," pp. 225-6.

Arsinoe. Perhaps at this date, the Romans had not yet perfected the operation and organization of the bureaucracy.

The grapheion, bureau for document preparation and deposition, handled many types of business transactions over the year. The next chapter deals with the business volume that passed through the bureau, the types of contracts drawn up there and their economic implications.

CHAPTER II

THE BUSINESS VOLUME

Introduction

The grapheion was at the center of the economic life of Tebtunis because it was both registry and depository for the business documents of the town. All of the documents prepared at the grapheion were listed in one or another of the register (anagraphe) types, so a study of the extant registers will reveal the volume and variety of business which the Tebtunites conducted within the limited amount of time covered by these registers. Not only can we ascertain the general business volume, but also the amounts of land, money, and produce and the number of slaves and farm animals which changed hands. Further, an examination of the loans and other forms of indebtedness may show both the economic conditions of the common man and the state of the general economy along the southern rim of the Fayum at this time.

The main sources for the study of the business volume of Tebtunis are the three extant anagraphai: P Mich. II 121, 123, and also V 238. These three seem to be complete and official registers of the contracts and other documents drawn up at the grapheion. The time covered by three documents is very limited, however.

P Mich. II 121 verso contains the index for documents registered in the last four months of A.D. 42 (Pachon/April - Kaisareios/August.[1] P Mich. II 123 recto, II-XXII[2] preserves the records for the whole year A.D. 45-6 (the sixth year of Claudius) and P Mich. V 238 contains the register for the first four months of the seventh year of Claudius (Sebastos/August - Choiak/December, A.D. 46). Each of these three anagraphai is different in some way from the others.

The anagraphe P Mich. II 123 is the basic document for this study. It records, on the recto, all the written business that passed through the grapheion during the sixth year of Claudius (A.D. 45-6). This register contains entries for contracts in the form of homologies and syngraphai, as well as praseis, misthoseis, and daneia. In addition to these business contracts, there are a number of non-contracts: cheirographiai, hyponemata, nomoi, graphai, and hyponematia. The non-contracts have been omitted from consideration, because they appear in only one anagraphe and also because their numbers pertain more to the grapheion's business than the town's business.

The other two anagraphai, P Mich. II 121 verso and P Mich. V 238, are especially useful for comparison with P Mich. II 123 because they cover analogous time periods. Both of these anagraphai are registers of contracts alone. P Mich. II 121 verso, however, has an

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1. The Egyptian year began on the first day of Thoth (Sebastos in P Mich. II 123) which corresponds to our August 29.
2. P Mich. II 123 recto, I, contains part of the grapheion account.

accompanying eiromenon (on the recto), a series of fifty abstracts, forty-eight of which correspond to the index on the verso.[1] The incomplete eiromenon extends from the fifth day of Germanikos (Pachon)[2] to the third day of Payni in the last quadrimester of A.D. 42.

P Mich. V 238 does not have an eiromenon, but it does note the grammatikon payments[3] as P Mich. II 123 does, although 238 lacks the summations of these charges which the longer document does have. Not only is this document useful for comparison with the year-long anagraphe, but since it covers the first quadrimester of A.D. 46-7, it can perhaps show the effects of the year's flood on the business volume.

The other anagraphai in the Michigan Tebtunis collection are incomplete and in many instances duplicate parts of P Mich. II 121, 123 and V 238.[4] These three, then, are the only anagraphai useful for determining the economic situation, while the other incomplete registers can be used for filling in blanks or for checking entries.

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1. Two of the abstracts lack corresponding entries in the anagraphe, due, probably, to scribal error.
2. Both Roman and Egyptian months names are mixed in the anagraphai. The Roman month names varied with each ruler and the fortunes of his immediate family in whose honor the months were usually named. Cf. K. Scott, "Honorific Months," YCS 2 (1931) pp. 199-278. The main changes in the anagraphai are :Germanikeios (121)= Pachon; Sebastos (123, 238) = Thoth; Neos Sebastos (123,238) = Hathyr; Kaisareios (121,123) = Mesore. The month names of P Mich. II 123 will be used throughout this paper.
3. P Mich. II 123, introduction, pp. 89-92. Wallace, Taxation in Egypt, pp. 236-7; H.I. Bell, "The 'Thyestes'of Sophocles and an Egyptian scriptorium," Aegyptus 3-4 (1921), pp. 281-8 all deal with writing fees.
4. Husselman, "Procedures," pp. 223-238. The duplicates are P Mich. II 124, 126, 128; V 240; inv. 3501.

Some corrections and filling in of blanks cannot be accomplished, especially for P Mich. II 123, which is severely damaged in the months Epeiph to Kaisareios. Included in this section, then, is an estimate of the number of lost business contract entries. Such an estimate is needed for a clearer, albeit impressionistic view of the year's business volume.

Methods

Each entry in the anagraphai corresponds to a real business transaction. Therefore, to say that there are 247 entries in P Mich. II 121, for example, means that in the last four months of A.D. 42, 247 business contracts were drawn up by Kronion and the grapheion staff and entered by them into the registers. The most fruitful method of dealing with the many entry totals for days, months and quadrimesters is to employ comparisons, averages and percentages.

Two averages will be employed: the arithmetic average (mean) and the modal average (mode). The arithmetic mean is the most reliable; it is found by the familiar method of adding all the values in a group and dividing the sum by the number of values. While the arithmetic mean is generally the most reliable description of a group (or "population"), the normal distribution of these values is sometimes thrown off the symmetrical bell-shaped curve by a value or amount that is disproportionately high or low. In such a case the distribution is said to be "skewed." If, for example, all the leases in a given month involve land amounts of from 1 to 5 arouras, except for one lease involving 20 arouras, the whole curve of the distribution will be skewed and the average will not reflect the size of the land

plots leased. In a situation like this, the modal average can be employed to give a somewhat less reliable average, but a more typical value. The mode expresses the most characteristic value found in the distribution. If, for example the distribution includes all the loans made in a month and the amount of drachmas which appears most often in this distribution is 100 drachmas, then 100 drachmas is the mode. The arithmetic average in this case might be 125 drachmas, however. Sometimes two values are most characteristic and the distribution may be said to be bimodal. In other cases, no one value appears with enough frequency to be called a mode, so a modal interval is chosen to show which group of values is the most characteristic.[1]

Percentages will comprise a large part of the data description. In addition to enumerating the usual part-whole percentages, that is, the percentage of the whole group of entries for A.D. 45-6 formed by the entries for the month Tybi, for example, there will also be a comparison of the percentage difference between the actual volume and the average volume or one quadrimester's volume and another's. The percentage difference expresses the amount that the smaller value must increase to reach the larger value. Often values are compared against a constant such as an average. When a comparison of that sort is presented in a table, the percentage difference appears with a plus or a minus sign before it to indicate whether the value is larger or smaller than the constant.[2]

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1. T.G. Connolly and W. Sluckin, An Introduction to Statistics for the Social Sciences (2nd ed.; London: Cleaver and Hume Press, Ltd., [1957]), pp. 18-29, 34-6.

2. Table 8 is an example.

The source of the data to be studied with these methods is the anagraphe entry. About one-third, or 36.6 percent, of the total number of entries in the three registers are called homologies. A homology is a contract form in which the object of the agreement is expressed in the third person: "The party of the first part acknowledges to the party of the second part the receipt of a dowry." The homology is not a contract in the modern sense, however, since it documents an act and not a promise to perform an act. Usually, the two or more parties to an agreement had already made the agreement; they came to the scribe to document what was already in effect. Sometimes, however, the scribe was confronted by the unusual task of drawing up a contract involving a future obligation and in confusion labeled this document "homology" when it actually was not.[1]

The syngraphe (συγγραφή), the native Egyptian contract is another frequently encountered document name. It was often used for alimentary contracts, dowries, and marriage agreements. The other document types mentioned in the anagraphe entries are the loans (δάνεια), leases (μισθώσεις), apprentice contracts (διδασκαλικαί). Of course, these document types do not appear complete; they are just named in the entries.

The anagraphe entry is the basic unit for extracting data from these three papyri, but each entry is by nature terse and, to us, cryptic, since its purpose was to indicate merely the existence of the transaction and its parties, rather than to describe the transaction in detail. The scribes did not consistently include the

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1. P. Dura, p. 14, note 7.

same bare bits of information in the entries, even in entries for the same type of contract. An example of a lease entry which gives a fair amount of information is: μίσ(θωσις) Ἀνχιᾶτος πρὸ(ς) Εὐ-τυχο(ν) χλορῶν ἀρο(υρῶν) ς "Lease of Anchias to Eutychos, 6 arouras of fodder (land)."[1] From this line, we know the type of contract (μίσθωσις), the amount of land leased (6 arouras) and the type of crop to be planted (χλωρόν). Another lease entry which contains less information is: μίσ(θωσις) Ἀρεντώτου πρὸ(ς) Ἁρ-μιῦσιν ἀρο(υρῶν) δ. "Lease of Harentotes to Harmiysis, 4 arouras."[2] In this one, we do not learn which crop was specified in the original lease contract, just the amount of land.

Other anagraphe listings are even shorter, particularly the non-specific homologies. Usually, the object of the homology is stated in the genitive case as homologia enoikeseos or homologia praseos. But many contracts are just called "Homology" as ὁμολ-(ογία) Γαλάτου καὶ Λυσᾶτος πρὸ(ς) Διδύμη(ν) ἀρο(υρῶν) δ. "Agreement of Galates and Lusas with Didymos, four arouras."[3] It is impossible to tell what happened to the 4 arouras. Were they sold, mortgaged, leased, ceded?

Many entries are incomplete because the papyrus is damaged. In P Mich. II 123, the months Epeiph and Kaisareios have lost many lines.[4] The eiromenon of P Mich. II 121 has lost the first ten

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1. P Mich. II 123, III, 12.
2. P Mich. II 123, XIX, 13.
3. P Mich. II 123, VII, 6.
4. P Mich. II 123, XIX, 1-8, 30-45; XX, XXI, XXII are the badly damaged columns.

abstracts completely and the first remaining column is badly damaged. Sometimes, it is possible to read between the lacunas and detect the nature of the contract, but it is often difficult even to decide whether the few words left in a line are part of a new contract or continued from a previous line. The dates on which the contracts were written are affected by the damage too. Generally, all the entries have been ascribed to the preceding date, even though a great number of lines may indicate a lost date in between.

To laconic listings and papyrus damage may be added scribal error and omission. Not only did scribes incorrectly copy such details as names of the parties, quantities of land, money or produce exchanged, they also left out whole entries. While discrepancies can be checked against the duplicates for some lines, it is not always easy to decide which entry is the correct one, the preliminary register or the final register.

These difficulties beset everyone working with papyri and that is the reason for approaching all statistical data with caution. Nothing we can say is absolutely certain, yet it is, nevertheless, useful and interesting to arrive at some approximation, at least, of the business volume in the village of Tebtunis for twenty months of its history.

Business Volume by Quadrimester

Our three extant anagraphai inform us about the business volume for one period of sixteen consecutive months (Sebastos/

September, A.D. 45 - Choiak/December, A.D. 46)[1] and for one isolated quadrimester (Pachon/May, A.D. 42 - Kaisareios/August, A.D. 42).[2] Every year was divided[3] into three quadrimesters of four months each which corresponded to the three seasons of the Egyptian year. In the group of twenty months which we have here, there are five quadrimesters; two are first quadrimesters (Sebastos - Choiak, A.D. 45 and A.D. 46); two are final quadrimesters (Pachon to Kaisareios and the intercalary days, A.D. 42 and A.D. 46) and the fifth is the mid-year quadrimester (A.D. 45-6).

In A.D. 45, there was a total of 230 entries in the anagraphe during the first quadrimester: 58 in Sebastos/September, 74 in Phaophi/October, 61 in Neos Sebastos/November, and 37 in Choiak/December. The analogous four months of the following year (A.D. 46) have 89 entries in Sebastos, 48 in Phaophi, 65 in Neos Sebastos and 39 in Choiak. The total for the first quadrimester of A.D. 46-7 is 241 entries.

The last quadrimester of the second year of Claudius and the last quadrimester of the sixth year of Claudius are similar to each other in volume. In A.D. 42 Pachon/May has 54 entries, Payni/June 37, Epeiph/July 68, and Kaisareios and the intercalary days/August 88.[4]

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1. P Mich. II 123 and P Mich. V 238.
2. P Mich. II 121.
3. The year was divided into three parts for administrative purposes; the anagraphai of the 121 and 238-type each cover four months.
4. The right hand margin of P Mich. 123 is damaged at the end of Kaisareios, so it is impossible to discover where the intercalary days begin. The five intercalary days are also called the Epagomenai.

In the sixth year of Claudius (A.D. 45-6), P Mich. I 123 shows that Pachon had 42 contracts entered in the anagraphe, 47 in Payni, 61 in Epeiph and 104 in Kaisareios and the intercalary days. The total for the second Claudian year is 247 and for the sixth year 254.

The second quadrimester of A.D. 45-6 is without a comparable document from the same time period, the middle of the year. Tybi/January has 53 contracts registered, Mecheir/February has 50, Phamenoth/March 39 and Pharmouthi/April 48. The total for the second quadrimester is 190. Table 6 summarizes the number of entries per month.

TABLE 6

CONTRACT ENTRIES PER MONTH

Month	P Mich. 123 (A.D. 45-6)		P Mich. 238 (A.D. 46)
First Quadrimester			
Sebastos	58		89
Phaophi	74		48
Neos Sebastos	61		65
Choiak	37		39
Total	230	Total	241
Second Quadrimester			
Tybi	53		
Mecheir	50		
Phamenoth	39		
Pharmouthi	48		
Total	190		

TABLE 6 - Continued

CONTRACT ENTRIES PER MONTH

Month	P Mich. 123 (A.D. 45-6)		P Mich. 121 (A.D. 42)	
Third Quadrimester				
Pachon	42		54	
Payni	47		37	
Epeiph	61		68	
Kaisareios	104		67	
Intercalary days	...		21	
	Total	253	Total	247

The average number of contract entries per quadrimester is 232. Of the five available quadrimesters, three are higher than this average and two are lower. Table 7 summarizes the percentage difference between the mean number of entries per quadrimester and the actual number of entries.

TABLE 7

COMPARISON OF QUADRIMESTER VOLUME: ACTUAL TO MEAN[a]

Quadrimester	Actual Volume	Difference in Percent
Sebastos Choiak, A.D. 45-6	230	- 0.87
Sebastos-Choiak, A.D. 46-7	241	+ 3.9
Tybi - Pharmouthi, A.D. 45-6	190	- 22.11
Pachon - Kaisareios, A.D. 45-6	254	+ 9.5
Pachon - Kaisareios, A.D. 42	247	+ 4.3

[a]The mean volume per quadrimester is 232 contracts.

TABLE 8

ACTUAL BUSINESS VOLUME COMPARED WITH MEAN VOLUME PER MONTH

Month	Actual Volume[a]	Difference in Percent[b]	Month	Actual Volume[a]	Difference in Percent[b]
	P Mich. 123			P Mich. 238	
Sebastos	58	---	Sebastos	89	+ 34.83
Phaophi	74	+ 21.62	Phaophi	48	- 20.83
Neos Sebastos	61	+ 0.05	Neos Sebastos	65	+ 10.76
Choiak	37	- 56.75	Choiak	39	- 48.71
Tybi	53	- 0.09			
Mecheir	50	- 16.00			
Phamenoth	39	- 48.71		P Mich. 121	
Pharmouthi	48	- 20.83			
Pachon	42	- 38.09	Pachon	54	- 7.40
Payni	47	- 23.40	Payni	37	- 56.75
Epeiph	61	+ 0.50	Epeiph	68	+ 14.70
Kaisareios[c]	104	+ 44.23	Kaisareios[c]	88	+ 34.09

[a]In entries per month.

[b]Difference in percent of actual volume from mean volume (58.00).

[c]Includes intercalary (epagomenal) days.

The mean volume of contract entries per month, using all twenty months as a basis for the computations, is 58 contracts. Table 8 summarizes the percentage difference between the real volume and the mean volume of the entries per month. From Table 8 we notice that only 30 percent of the months, or 6 months out of 20, are above the mean. The months which are above average in volume occur in the first and last quadrimesters. There are 3 high months in the first quadrimester: Phaophi (P Mich. II 123), Sebastos and Neos Sebastos (P Mich. V 238)and 3 high months in the third quadrimester: Kaisareios (P Mich. II 123) and Epeiph and Kaisareios (P Mich II 121). The lowest volume months are also found in these otherwise busy quadrimesters: Choiak (in both P Mich. II 123 and V 238) and Payni (P Mich. II 121). The second quadrimester (Tybi to Pharmouthi) has no high or low peaks. It is below the mean volume in every month.

It is evident from this survey that the busiest time of the year for making and registering contracts in the grapheion occurred during the months just before and immediately after the new year. This is not surprising because the new year coincided with the height of the Nile flood upon which all agriculture, and ultimately the whole Egyptian economy, depended. The massing of business around the new year becomes clearer to see upon studying the curve of the volume of the continuous period of sixteen months (Sebastos, A.D. 45 - Choiak, A.D. 46) and comparing this curve to those of the analagous quadrimesters.

There is a steep and steady rise in the curve of the volume

during the last quadrimester of A.D. 45-6 with the peak occurring in Kaisareios and the intercalary days.[1] After the new year there is a 17 percent drop in the number of entries from Kaisareios to Sebastos. There is an even more abrupt drop from Sebastos to Phaophi, a change of 85 percent with a short upswing in Neos Sebastos of 35 percent and then another decline into the low and moderate months of the second quadrimester.

By comparison, the two other quadrimesters, the last four months of A.D. 42 and the first four months of A.D. 45-6, generally show a rise and fall in volume from month to month but with a difference, The last quadrimester of A.D. 42 does not reach the great volume of the analogous period four years later. There is a difference of 18 percent between the 88 entries of the peak of A.D. 42 in Kaisareios and the 104 entries of the peak of A.D. 45-6 in Kaisareios. A.D. 45-6 begins low, 53 percent lower than the following year, then rises 28 percent in Phaophi after which month there is a steady decline.

Since we do not have the data for the first quadrimester of A.D. 42-3 or the last quadrimester of A.D. 44-5 in order to complete the curves of A.D. 42 and 45 respectively, we cannot tell whether the peak of volume came during the time represented by the extant information or during the quadrimesters just prior to or just following the existing ones. We can only say that the last quadrimester of A.D. 45-6 is higher in volume than that of A.D. 42 by 3 percent. The supposition that A.D. 45-6 was higher in volume is reinforced by

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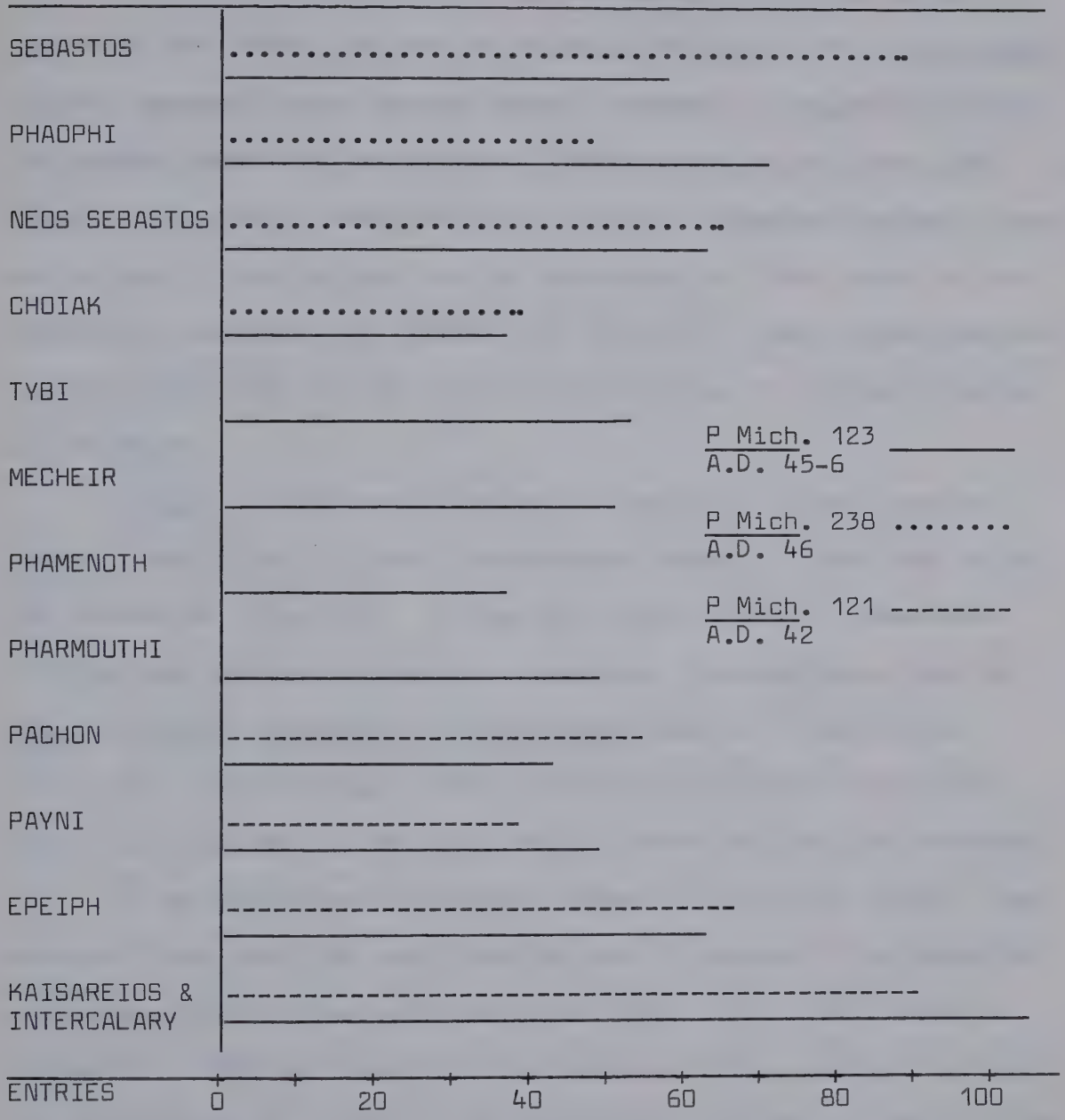
1. See Chart V.

CHART V

BUSINESS VOLUME BY MONTH



the estimates of the lost lines of P Mich. II 123.

Estimated Lines for P Mich. II 123

In order to arrive at a clearer impression of the actual volume of A.D. 45-6, we need to estimate the number of missing lines of this document which is most heavily damaged in columns XVIII-XXII, the months Epeiph and Kaisareios. Before deciding how many lost lines and contracts there would be, we must enumerate how many lines are actually there as well as the percentage of lines used for non-contracts, accounts, and double-line entries. These percentages must be subtracted from the estimated lines to give the estimated number of contracts.

P Mich. II 123 has 950 extant lines in 21 columns ranging in length from 35 to 55 lines. The average number of lines per column is, therefore, 45 or 49.[1] Of the 950 extant lines, 9 percent or 87 lines are devoted to accounts received. Non-contracts such as nomoi, graphai, hyponemata, cheirographs take up 12 percent or 113 lines. There are also some contracts which take up more than one line: 3 percent or 28 lines contain these double-line contracts.

If we use 49 as the average number of lines per column, then we have a new total of 1029 lines in the 21 columns. This would be an increase of 79 lines over the extant 950. Since the number of contracts is not equivalent to the number of lines, we must subtract the percentages of lines for non-contracts, accounts and double-line

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1. In P Mich. II p. 87, the editor says that there is an average of 49 lines per column, but he does not say how he arrived at this figure. My average of 45 yields fewer lines than are actually there.

entries. After subtracting 9 percent of the 79 extra lines for the accounts (7 lines), 12 percent for the non-contracts (9 lines) and 3 percent for double-lined contracts (2 lines), then we have a 9 percent increase of an estimated 61 extra contracts over the previous number for the whole year. Since the business volume for Kaisareios is 15 percent of the total volume for the year, then, Kaisareios should have 15 percent of the estimated contracts -- 9 more, or 113 contracts.

Business Volume by Day

The grapheion does not seem to have been "open" for business every day of each month because only some days of the month have business entries in the anagraphai. In fact, 16.25 days or 54 percent of each 30-day month on the average showed anagraphai entries. The number of days per month on which business entries were made ranges from 12 to 22 days; the mode is seventeen days. Some of these business days were high in volume, other days have only one or two entries and still others have none at all. It is of interest, then, to see whether there is any pattern to the days of the month on which business was entered in the anagraphai, which days were busy and which were not, and if the Augustan anniversaries, celebrated on the hemerai sebastai (ἡμέραι Σεβασταί), had any effect on the volume for those days. As in the previous section, we will compare the volume, quadrimester to quadrimester and month to month of the different years. The volume per day will be balanced against the average number of entries per day, 3.6.[1] We will consider as a high volume or

1. The figure 3.6 is the average for all available months. It was found by dividing the total number of entries (1,162) by the total number of (legible) days (325).

busy day one which has five entries per day or more.

Business Days and Volume per Day of the First Quadrimester

In the first quadrimester of A.D. 45-6 (P Mich. II 123) and A.D. 46-7 (P Mich. V 238), business was entered on the number of days listed below in the first column of Table 9. The percentage difference between the mean of the number of days per month (16.6) on which business was entered and the actual number of business days is found in the second column.[1]

Table 10 below shows the number of busy or high volume days during these same months. Each of the high volume days had five or more entries.

The first column of Table 11 below shows the day of the month which had the highest number of entries. The number of entries on that day is indicated in the second column.

Business Days and Volume of the Third Quadrimester

During the third quadrimester of A.D. 42 (P Mich. II 121) and A.D. 45-6 (P Mich. II 123), business was entered in the anagraphai on the number of days which appear in the first column of Table 12. The difference between the average number of days of business per month and the actual number of business days per month is expressed in percentages in the second column.

Each month of these last quadrimesters except for one had high volume days of five or more entries. The number of high volume days

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1. Contracts alone have been considered.

TABLE 9

BUSINESS DAYS: FIRST QUADRIMESTER

P Mich. 123 A.D. 45-6			P Mich. 238 A.D. 46-7		
Month	Number of Days	Percentage Difference	Month	Number of Days	Percentage Difference
Sebastos	18	+ 8.4	Sebastos	13	+ 27.7
Phaophi	22	+ 32.6	Phaophi	15	- 10.7
Neos Sebastos	16	- 3.8	Neos Sebastos	22	+ 24.5
Choiak	18	+ 8.4	Choiak	16	- 3.8

TABLE 10

NUMBER OF HIGH VOLUME DAYS: FIRST QUADRIMESTER

Month	P Mich. 123 A.D. 45-6	P Mich. 238 A.D. 46-7
Sebastos	3	7
Phaophi	3	3
Neos Sebastos	4	4
Choiak	2	1

TABLE 11

HIGHEST VOLUME DAYS: FIRST QUADRIMESTER

P Mich. 123 A.D. 45-6			P Mich. 238 A.D. 46-7	
Month	Busiest Dates[a]	Number of Entries	Busiest Dates[a]	Number of Entries
Sebastos	23	9	30	19
Phaophi	2, 4, 5	6[b]	5, 7	10[b]
Neos Sebastos	9, 19	9[b]	25	8
Choiak	7, 27	5[b]	9	5

[a]The numbers represent the day of the month which showed the highest number of entries.

TABLE 11 - Continued

HIGHEST VOLUME DAYS: FIRST QUADRIMESTER

[b]Coincidently, each of the busiest days of this month had the same number of entries.

per month appears in Table 13 below.

It is interesting to note that the month with the fewest days, Kaisareios, has the greatest number of high volume days which suggests that the business which did occur had to be completed in a shorter amount of time, while the month with the largest number of business days, Epeiph of A.D. 45-6, has no day with five entries; it appears that the business of that month was spread out over the greatest number of days. This pattern, however, was not true for the first quadrimester.

TABLE 12

BUSINESS DAYS: THIRD QUADRIMESTER

	P Mich. 121 A.D. 42		P Mich. 123 A.D. 45-6	
	Number of Days	Percentage Difference	Number of Days	Percentage Difference
Pachon	14	- 18.6	16	- 3.8
Payni	18	+ 8.4	14	- 18.6
Epeiph	18	+ 8.4	22	+ 32.5
Kaisareios	14	- 18.6	12	- 38.3
Intercalary Days	4	....	..	....

TABLE 13

NUMBER OF HIGH VOLUME DAYS: THIRD QUADRIMESTER

Month	P Mich. 121 A.D. 42	P Mich. 123 A.D. 45-6
Pachon	5	1
Payni	1	4
Epeiph	1	0
Kaisareios	7	10
Intercalary Days	2	..

TABLE 14

HIGHEST VOLUME DAYS: THIRD QUADRIMESTER

	P Mich. 121 A. D. 42		P Mich. 123 A.D. 45-6	
Month	Busiest Dates[a]	Number of Entries	Busiest Dates[a]	Number of Entries
Pachon	5	11	27	5
Payni	17	7	7	8
Epeiph	30	14	29	5
Kaisareios	16	15	7, 24	14[b]
Intercalary Days	5	12	.....	...

[a]The numbers represent the day of the month which showed the highest number of entries.

[b]Coincidently, each of the busiest days of this month had the same number of entries.

The highest volume day for each month appears in column one of Table 14 and the number of entries made on that day in column two.

Business Days and Volume of the Second Quadrimester

The second quadrimester stands alone without an analogous period with which to compare it. While it has the lowest total volume over its four months than the other quadrimesters, the mid-year quadrimester is about average in the number of business days per month. The first and fourth months of the quadrimester, Tybi and Pharmouthi both have 15 business days, 10.6 percent lower than the average. Mecheir is slightly higher than the average, by 2.4 percent, with 17 business days. Phamenoth, the third month of the quadrimester, is the lowest with only 12 business days, 38.3 percent below the average. There were probably more business days in Phamenoth, but damage to the papyrus on the left margin has removed some of the dates.[1]

Tybi and Mecheir had 5 and 4 high volume days respectively; Phamenoth and Pharmouthi both had 3 high volume days. There are few days which can be said to be "busy." The seventh day of Tybi, the second day of Mecheir, the fourth of Phamenoth and the fifth of Pharmouthi are the busiest days in this quadrimester.

Business Patterns

Coincident Business Days

We spoke earlier of the grapheion's being "open" for business as if it were a modern business office. To say that it was "open" is perhaps misleading because the grapheion was located in Kronion's house. As a result procedures were probably informal and contracting parties or others who required a scribe could go there whenever

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1. P Mich. II 123, XII, lines 44-51, XIII, lines 1-10.

they needed. Possibly, there were days on which the grapheion did no business because there was a religious festival or some other holiday. If there were specific days on which the grapheion was "open" each month, then we would expect that the days on which business was entered in the registries would fall into some recurring pattern and that the same days in each of the four months of a quadrimester would be business days.

Upon inspection, however, we can see that this is generally not the case, although there are some business days which coincide within a quadrimester, such as the sixteenth day of the first quadrimester of A.D. 46 (P Mich. V 238) which is a business day in each of the four months. Table 15 summarizes the number of times per quadrimester during the twenty extant months that each day appears as a business day in the anagraphai. The months are abbreviated as indicated in the table.

Each month has thirty days on which grapheion business could be entered in the registries. There are ten days out of these thirty which appear in 65 percent or more of the twenty extant months as business days. The fourth day of the month appears in 80 percent or sixteen out of twenty months, the ninth day appears in 75 percent or fifteen out of twenty months and the sixteenth day in 90 percent or eighteen months out of twenty. The other days which appear in 65 percent or more of the months are found summarized in Table 16.

TABLE 15

COINCIDENT BUSINESS DAYS

Day of Month	P Mich. 238 First Quadrimester	P Mich. 123 First Quadrimester	P Mich. 123 Second Quadrimester	P Mich. 123 Third Quadrimester	P Mich. 121 Third Quadrimester	Total Number of Months
1	(4)	(2)(3)(4)	(7)		(9)	6
2	(1)(2) (4)	(2) (4)	(5)(6)(7)	(10)(11)(12)	(11)	12
3	(2)	(2)	(6)	(10)(11)(12)	(9)(10)	8
4	(2)(3)(4)	(2) (4)	(5)(6)(7)(8)	(10)(11)(12)	(9)(10)(11)(12)	16
5	(1)(2)(3)(4)	(2)	(5)(6) (8)	(9)(10)	(9)(10)(11)(12)	14
6	(2)(3)	(3)	(8)	(9) (11)		6
7	(1)(2)(3)	(4)	(5) (8)	(9)(10)(11)(12)	(9) (11)	12
8		(1)(2)(3)(4)		(11)	(11)	6
9	(1)(2)(3)(4)	(1)(2)(3)(4)	(6) (8)	(9) (11)	(9) (11)(12)	15
10	(2)	(1) (3)(4)	(5) (8)		(11)	7
11	(4)	(2)(3)(4)	(5)(6) (8)	(10)(11)	(9)(10)(11)(12)	13
12	(1)(2)(3)	(1) (4)	(6) (8)	(9)(10)	(9) (11)(12)	12
13	(2) (4)	(2)	(8)	(9)(10)(11)	(11)	8
14	(1) (3)	(1)(2) (4)	(8)	(9)(10)(11)	(9)(10)(11)(12)	13
15	(4)	(2)		(9)		3
16	(1) (3)(4)	(1)(2)(3)(4)	(5)(6)(7)(8)	(9)(10)(11)	(9)(10)(11)(12)	18
17	(3)(4)	(2)(3)(4)	(6) (8)	(9)(10)(11)	(9)	11
18	(3)	(1)(2)(3)	(6) (8)	(9)(10)(11)	(9)(10)	11
19	(3)(4)	(1) (3)	(5)(6)	(9)	(10)(11)(12)	10

TABLE 15 - Continued

COINCIDENT BUSINESS DAYS

Day of Month	P Mich. 238 First Quadrimester	P Mich. 123 First Quadrimester	P Mich. 123 Second Quadrimester	P Mich. 123 Third Quadrimester	P Mich. 121 Third Quadrimester	Total Number of Months
20	(3)	(2)	(5) (7)	(11)(12)		6
21	(2)(3)	(1)(2)(3)(4)	(5)(6) (8)	(11)	(10)	10
22	(1)(2)(3)(4)	(2) (4)	(5)(6)(7)(8)	(11)	(9)(10)(11)	14
23	(3)	(1)(2)	(5) (7)(8)	(10)(11)(12)	(12)	10
24	(3)	(1)(2)(3)	(5)(6)	(11)(12)	(9) (11)(12)	11
25	(1)(2)(3)(4)	(1) (3)	(6) (8)	(10)(11)	(9)(10) (12)	13
26	(1)(2) (4)	(1) (4)	(6)(7)	(9) (11)	(9)(10)(11)	12
27		(1)(2) (4)	(6)(7)	(11)	(10) (12)	8
28	(1) (3)(4)	(1)(2)(3)		(9) (11)(12)	(9)(10)(11)(12)	13
29	(1) (3)(4)	(1) (3)	(5)(6)(7)(8)	(9) (11)	(10) (12)	13
30	(1)(2)(3)(4)	(1)(2) (4)	(5)(6)		(11)	10

Months:
(1) Sebastos
(2) Phaophi
(3) Neos Sebastos
(4) Choiak
(5) Tybi
(6) Mecheir
(7) Phamenoth
(8) Pharmouthi
(9) Pachon
(10) Payni
(11) Epeiph
(12) Kaisareios

TABLE 16

COINCIDENT BUSINESS DAYS: PERCENTAGES

Day	Appearing in Number of Months	Percentage of Extant Months
5	14	70
11	13	65
14	13	65
22	14	70
25	13	65
28	13	65
29	13	65

While there are some dates which appear as business days in a majority of the months, there are also a few dates which appear very seldom. The eighth day is one of those found only in six out of twenty months and the fifteenth is found only in three months. Since both the eighth and fifteenth are among the dates called Sebastai, there may be a connection between the infrequency of their appearance and the holiday.

The Hemerai Sebastai

The hemerai Sebastai, ἡμέραι Σεβασταί, the Augustan Days, are one variety of holiday on which prominent imperial anniversaries such as dies natalis and dies imperii were commemorated by affixing the word Sebaste (Σεβαστή) to the dating formula of a public document.[1]

1. W.F. Snyder, " ἡμέραι Σεβασταί ," pp. 197-233.

The reign of Claudius is particularly rich in occurrences of Sebastai dates[1] and P Mich. II 123, a Claudian papyrus, has nine appearances of this designation in both the anagraphe and the accounts. Therefore, it is appropriate to discuss the origin of these particular Sebastai and the effect, if any, of these commemorations on the business volume per day and the operation of the grapheion.[2]

The anagraphe section of P Mich. II 123 has five business days called Sebastai. Phaophi 8 (October 5)[3] commemorates the natalis of Claudius. The ruling emperor's actual birthday was Kaisareios 8 (August 1)[4] but some imperial anniversaries were celebrated monthly on the appropriate day while others were annual.[5] In this case, the eighth of each month was probably Sebaste because the eighth of Neos Sebastos[6] and Epeiph[7] appear in the anagraphe as Sebastai. However, the five other occurrences of the eighth in Sebastos, Choiak, Tybi Pharmouthi and even Kaisareios do not have the designation. Kronion who has been faulted for his carelessness in other grapheion matters,[8]

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1. Ibid., p. 225.
2. The nine Sebastai of P Mich. II 123 are: recto (anagraphe): Phaophi 20 (V, 23); Phaophi 8 (IV, 30); Neos Sebastos 8 (VI,26); Epeiph 8 (XVIII, 21); Phaophi 15 (V,6). Verso (accounts): Kaisareios 27 (VIII,22); Payni 2 (VI, 18); Kaisareios 2 (VII,12); Neos Sebastos 20 (XI, 9).
3. P Mich. II 123 recto, IV, 30.
4. Snyder, " ἡμέραι Σεβασταί ," pp. 215, 225; P Mich. II 123, introduction pp. 102-3.
5. Snyder, " ἡμέραι Σεβασταί ," p. 214, note 3.
6. P Mich. II 123 recto, VI, 26.
7. P Mich. II 123 recto, XVIII, 21.
8. P Mich. V, introduction, p. 11.

did not draw up P Mich. II 123 with close attention to Sebastai.[1]

The five days which Kronion did call "Sebastai" are similar to non-Sebastai in volume and type of business entries except for their special significance as imperial anniversaries. Phaophi 8 was a day on which three entries were made in the anagraphe: a loan for 28 silver drachmae,[2] a lease of 8½ arouras,[3] and an acknowledgement of a division of a building (site).[4] Neos Sebastos 8 has two entries: a receipt of a dowry and a lease for kepourike ge.[5] Epeiph 8 is a high volume day; it has five entries: a homology concerning 100 drachmae, a lease, a hyponema, a loan of 320 drachmae and a nursing contract.[6]

Another date designated as Sebaste in the anagraphe is Phaophi 20 (October 17) which reflects the celebration of either Tiberius' natalis or, more likely, the deification of Augustus on Thoth/ Sebastos 20 (August 17).[7] There are four entries for this date: a mortgage of a kleros against a loan of 400 drachmae, two anaphoria and a hyponema.[8]

The Augustalia was commemorated on Phaophi 15[9] and there are

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1. Snyder, " ἡμέραι Σεβασταί ," p. 208, note 4; p. 211, note 5; p. 215, note 7; p. 216, note 7.
2. P Mich. II 123, recto, IV, 32.
3. P Mich. II 123, recto, IV, 31.
4. P Mich. II 123 recto, IV, 30.
5. P Mich. II 123 recto, VI, 26 and 27.
6. P Mich. II 123 recto, XVIII, 21-25.
7. Snyder, " ἡμέραι Σεβασταί ," pp. 211 and 225. In note 5 on p. 211 Snyder notices that the actual anniversary, Sebastos 20, appears twice (verso and recto) in P Mich. II 123 without the Sebaste designation and in five other months as well.
8. P Mich. II 123 recto, V, 124-27.
9. Snyder, " ἡμέραι Σεβασταί ," p. 216.

four entries listed for this day: two leases, a loan for 248 drachmas and a deposit of 220 drachmas.[1]

As we can see, the days designated as Sebastai do not show any great deviation from the average either in business volume per day or type of business recorded in the anagraphe. The average volume per day for all the business days in the three anagraphai is 3.6;[2] the average business volume for the five days called Sebastai is 3.7, a difference of 2.7 percent. The same dates also occur without being specified as Sebastai and when added to the designated Sebastai, the average volume per day falls to 3.2, a difference of 12.5 percent from the total average.[3] In addition to an average volume per day, the types of documents usually found entered in the anagraphe on regular days are also found on the Sebastai: homologies, loans, leases, receipts, hyponemata, anaphoria.

The unexceptional nature of the Sebastai data, at least in relation to the grapheion business, is seen again in the accounts on the verso of the papyri. The four entries there on Payni 2, Kaisareios 2 and Kaisareios 27 (all in the sixth year of Claudius) and on Neos Sebastos 20 (the seventh year of Claudius) are similar

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1. P Mich. II 123 recto, V, 6-9.
2. This average is obtained by dividing the total entries for 20 months, 1,162 (contracts only) by the total days in the 20 months on which business was entered, 325.
3. The average 3.7 was found when the total entries made on the designated Sebastai were divided by the number of designated Sebastai. The average 3.2 comes from the total number of entries made on all the dates (with and without the designation) in the three extant documents, divided by the number of occurrences of these dates.

to the types of entries found throughout the rest of the grapheion accounts.

On Payni 2[1] there is an entry for the price of bread and wine (4.5 obols) connected with the arrival of Ptollas of Talei. Kaisareios 2[2] records the payment of the diagraphe of 120 silver drachmas and the traveling expenses of 6 obols. Kaisareios 27[3] saw the operators of the grapheion reimburse the two guards of the diagraphe for their traveling expenses of 10 obols. In the next year, on Neos Sebastos 20,[4] there is the note of the price of one roll of papyrus, 4 silver drachmae.

If the Sebastai were festival days on which all business stopped at the grapheion and elsewhere, then we would expect that there would be no entries at all for these days. If, however, the grapheion stayed "open" when the other town businesses were taking time off, then we would expect there would be a greater number of entries, because people would have more free time in which to have documents prepared. But neither situation seems to have existed, with one possible exception.

The Augustalia, celebrated on the fifteenth day of the month, may have had some effect on the grapheion business. The fifteenth day appears only three times as a business day in the twenty months

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1. P Mich. II 123 verso, VI, 18.
2. P Mich.II 123 verso, VII, 12.
3. P Mich. II 123 verso, VIII, 22.
4. P Mich. II 123 verso, XI, 9.

of anagraphe entries.[1] Perhaps its absence as a business day may be related to the fact that it was a holiday, or the fact that it preceded the sixteenth day which appears in 90 percent of the months. In the anagraphai, the fifteenth occurs in Phaophi, A.D. 45,[2] Neos Sebastos, A.D. 46,[3] and Pachon, A.D. 46.[4] Although there are only three of these in the anagraphai, the accounts on the verso of P Mich. II 123 show entries of expenditures and receipts for six occasions in Tybi, Payni, Phamenoth, Pharmouthi, Pachon and Sebastos.[5]

In comparison, the other Sebastai occur in the anagraphai more often. The second day, celebrating the birthday of Claudius' sister Drusilla, appears in fifteen out of twenty months; the eighth day (Claudius' birthday) and the twentieth day (deification of Augustus) both appear in six months while the twenty-seventh (Augustus' birthday) occurs in eight months. The average number of times any given day appears in the twenty months is 10.7 times and all of the Sebaste except the second day fall below this average.

The Sebastai, then, appear to have little effect upon the grapheion's operation either in the number of documents prepared and registered or in the kind of payments made by the grapheion staff. There is a possibility, however that the celebration of the Augustalia on the fifteenth day was a contributing factor to its infrequent

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1. See Table 15.
2. P Mich. II 123 recto, V, 6.
3. P Mich. V 238 IV, 173.
4. P Mich. II 123 recto, XV, 33.
5. Tybi: verso, II, 18; Payni: verso, VI, 27; Sebastos: verso, IX, 16; Phamenoth: verso, III, 23; Pharmouthi: verso, V, 11; Pachon: verso, V, 34.

occurrences as a business day. Since the Sebastai, other than Drusilla's birthday, appear less frequently than average, there may be some relationship between business days and holidays. Whether one Sebaste is represented more often or not as a business day possibly depended upon the importance of the holiday. Drusilla's birthday may have counted as a less important holiday because it was identified with the previous emperor and not the current one. Nor was there any immediate connection with the founder of the dynasty to add luster to her popularity eight years after her death in A.D. 38.[1] Despite her being favored with deification, celebrations in her honor must have waned by A.D. 46, which could account for the second day being used so much more as a business day than, say, the fifteenth.

Business by Ten-Day "Week"

There seem to be no business patterns to be found in the coincident business days and the holidays, so there may be a pattern to the business per "week."[2] The Egyptians, of course, did not have a"week"in our sense, but the thirty-day month did naturally fall into ten-day divisions (δεχημέραι).[3] By using tables and graphs, it is possible to follow the progression of entries from one part of the month to another.

A neat curve of increasing and decreasing volume is found in

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1. Snyder, " ἡμέραι Σεβασταί ," p. 208-210.
2. As in other sections, only business contracts will be considered.
3. H. Youtie, "The Heidelberg Festival Papyrus: a reinterpretation," in Studies in Roman Social and Economic History in Honor of Allen Chester Johnson, ed. by P.R. Coleman-Norton (New Jersey: Princeton University Press: 1951), p. 202.

the first two months of the year A.D. 45-6 (P Mich. II 123).[1] The volume starts off very low in the first ten-day period of Sebastos and gradually increases until it hits a peak in the last third of the month. The peak is maintained during the first third of Phaophi after which the volume falls off slowly throughout the rest of the month.

A similar pattern is remarked in the following year, A.D. 46-7 (P Mich. V 238).[2] Sebastos begins moderately and then increases to a high point in the last ten-day period. This high point continues in the first third of Phaophi and then volume drops off sharply. The business volume seems to have declined immediately after the new year and then picked up by the turn of the month. In both years, the highest volume for the first two months occurs during the last division of Sebastos and the first of Phaophi. The next two months of the quadrimester, Neos Sebastos and Choiak, do not show any such related fluctuations between the two years A.D. 45-6 and A.D. 46-7.[3] While the volume totals are close,[4] their distribution over the ten-day periods is not.

The second quadrimester of A.D. 45-6[5] shows only a little variation among the ten-day periods of each month. The first and last divisions of the four months are each slightly higher in volume than the middle division. The first ten-day period is the highest of the three for each month of the quadrimester.

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1. Table 18 and Charts VI, VII, VIII.
2. Table 21 and Charts VI, VII, VIII.
3. Tables 18, 21 and Charts VI, VII, VIII.
4. Table 6, above.
5. Table 19 and Charts VI, VII, VIII.

Kaisareios in the third quadrimester of A.D. 45-6[1] has extreme shifts in volume in its three divisions. The number of entries gradually increases over Epeiph to a high point in the first ten days of Kaisareios. In the second part of Kaisareios there is a sudden drop to a very low point followed by an unusually high rise in the last ten days. Such a drastic change in one month is not a usual occurrence according to the evidence of the twenty extant months. In A.D. 42,[2] on the other hand, each of the four months shows little variation among the three divisions. We can see a small curve beginning in Epeiph but the increase in volume over the three ten-day periods is very slight. The last ten-day division of Epeiph is higher than the first in Kaisareios, while the second division of Kaisareios is higher than either of the others in the same month. A.D. 42 seems to be a more stable year, at least its last quadrimester is more stable than the one four years later.

Generally, of the three ten-day periods of the month, the second is always lower than the other two. This situation is analogous, coincidentally, to the three quadrimesters, where the second quadrimester is lower than the others of the same year.

Business Volume: Conclusions

The Tebtunites of the first century A.D., like many modern people, left their business unfinished until the last minute. At the end of the year, particularly during the last two months, they rushed

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1. Table 20 and Charts VI, VII, VIII.
2. Table 17 and Charts VI, VII, VIII.

TABLE 17

BUSINESS VOLUME: TEN-DAY DIVISIONS

P Mich. 121 A.D. 42

DAY of MONTH	PACHON		PAYNI		EPEIPH		KAISAREIOS and INTERCALARY	
	Entries	Total	Entries	Total	Entries	Total	Entries	Total
1	0		1		0		0	
2	0		0		3		0	
3	3		2		0		0	
4	2		4		4		5	
5	11		1		1		6	
6	0		0		0		0	
7	0		1		4		0	
8	0		0		1		0	
9	1		0		7		3	
10	0	17	0	9	1	21	0	14
11	2		1		3		1	
12	1		0		6		1	
13	0		0		2		0	
14	1		2		1		9	
15	0		0		0		0	
16	8		1		4		15	
17	0		7		0		0	
18	8		1		0		0	
19	0		3		5		6	
20	0	20	0	15	0	21	0	32
21	0		2		0		0	
22	1		1		2		0	
23	0		0		0		7	
24	2		0		4		1	
25	5		2		0		5	
26	7		3		3		0	
27	0		1		0		4	
28	2		1		0		3	
29	0		3		3		1	
30	0	17	0	13	14	26	0	21
1							1	
2							0	
3							7	
4							1	
5							12	21

TABLE 18

BUSINESS VOLUME: TEN-DAY DIVISIONS

P Mich. 123 A.D. 45-6

DAY of MONTH	SEBASTOS		PHAOPHI		NEOS SEBASTOS		CHOIAK	
	Entries	Total	Entries	Total	Entries	Total	Entries	Total
1	0		2		7		1	
2	0		6		0		1	
3	0		3		0		3	
4	0		6		0		1	
5	0		6		0		0	
6	0		0		3		0	
7	0		0		0		4	
8	1		3		2		1	
9	2		5		9		1	
10	2	5	3	34	3	24	2	14
11	0		2		4		1	
12	4		0		0		2	
13	0		2		0		0	
14	1		2		0		3	
15	0		4		0		0	
16	6		4		6		4	
17	0		1		1		1	
18	4		5		6		0	
19	4		0		9		0	
20	0	19	1	21	0	26	0	11
21	3		5		2		1	
22	0		1		0		1	
23	9		1		0		0	
24	5		6		1		0	
25	6		0		2		0	
26	2		0		0		2	
27	3		0		1		7	
28	2		0		3		0	
29	2		3		2		0	
30	2	34	3	19	0	11	1	12

TABLE 19

BUSINESS VOLUME: TEN-DAY DIVISIONS

P Mich. 123 A.D. 45-6

DAY of MONTH	TYBI		MECHEIR		PHAMENOTH		PHARMOUTHI	
	Entries	Total	Entries	Total	Entries	Total	Entries	Total
1	0		0		0		8	
2	6		8		5		0	
3	0		2		0		0	
4	1		1		7		1	
5	2		6		3[a]		9	
6	0		0		0		0	
7	8		0		0		3	
8	0		0		0		0	
9	0		1		0		1	
10	5	22	0	18	0	15	1	23
11	0		1		3[a]		0	
12	0		2		0		2	
13	0		0		0		2	
14	0		0		0		3	
15	0		0		0		0	
16	2		4		5		4	
17	5		0		0		1	
18	0		5		0		0	
19	3		3		0		0	
20	2	12	0	15	3	11	0	12
21	2		0		0		0	
22	1		3		1		0	
23	4		0		1		7	
24	7		2		1		0	
25	0		2		0		1	
26	0		1		5		0	
27	0		2		4		0	
28	0		0		0		0	
29	4		1		1		2	
30	1	19	6	17	0	13	3	13

[a]Three of the six entries have been put in each division because the damage to the left margin of the papyrus does not permit us to assign the entries to the right days.

TABLE 20

BUSINESS VOLUME: TEN-DAY DIVISIONS

P Mich. 123 A.D. 45-6

DAY of MONTH	PACHON		PAYNI		EPEIPH		KAISAREIOS and INTERCALARY	
	Entries	Total	Entries	Total	Entries	Total	Entries	Total
1	0		0		0		0	
2	0		7		2		10	
3	0		3		1		1	
4	2		1		2		2	
5	3		1		0		6	
6	2		0		3		4	
7	3		11		0		11	
8	0		0		4		0	
9	1		0		2		7	
10	0	11	0	23	0	14	0	41
11	0		1		4		0	
12	3		1		0		0	
13	3		0		3		0	
14	2		4		3		0	
15	3		0		0		0	
16	1		1		2		0	
17	3		2		4		0	
18	1		7		1		0	
19	3		0		0		0	
20	0	19	0	16	1	18	9	9
21	3		0		2		0	
22	0		0		2		0	
23	0		3		4		5	
24	0		0		3		5	
25	0		0		1		14	
26	3		0		2		0	
27	0		3		0		0	
28	5		2		2		10	
29	1		0		13		0	
30	0	12	0	8	0	29	9	43
1							11	
2							0	
3							0	
4							0	
5							0	11

TABLE 21

BUSINESS VOLUME: TEN-DAY DIVISIONS

P Mich. 238 A.D. 46-7

DAY of MONTH	SEBASTOS		PHAOPHI		NEOS SEBASTOS		CHOIAK	
	Entries	Total	Entries	Total	Entries	Total	Entries	Total
1	0		0		0		1	
2	2		4		6		0	
3	0		2		0		0	
4	0		4		3		4	
5	9		10		2		3	
6	0		1		7		0	
7	2		10		1		0	
8	0		0		0		0	
9	3		5		2		5	
10	0	16	3	39	0	21	0	13
11	0		0		0		2	
12	3		1		7		0	
13	0		1		0		3	
14	6		0		1		0	
15	0		0		1		0	
16	4		0		1		4	
17	0		0		3		2	
18	0		0		2		0	
19	0		0		4		3	
20	0	13	0	2	1	20	0	14
21	0		1		1		0	
22	10		1		2		3	
23	0		0		0		1	
24	0		0		4		0	
25	10		2		1		1	
26	9		2		7		0	
27	0		0		0		2	
28	9		0		2		2	
29	4		0		4		1	
30	18	60	1	7	3	24	1	11

CHART VI

BUSINESS VOLUME:
FIRST TEN-DAY PERIOD

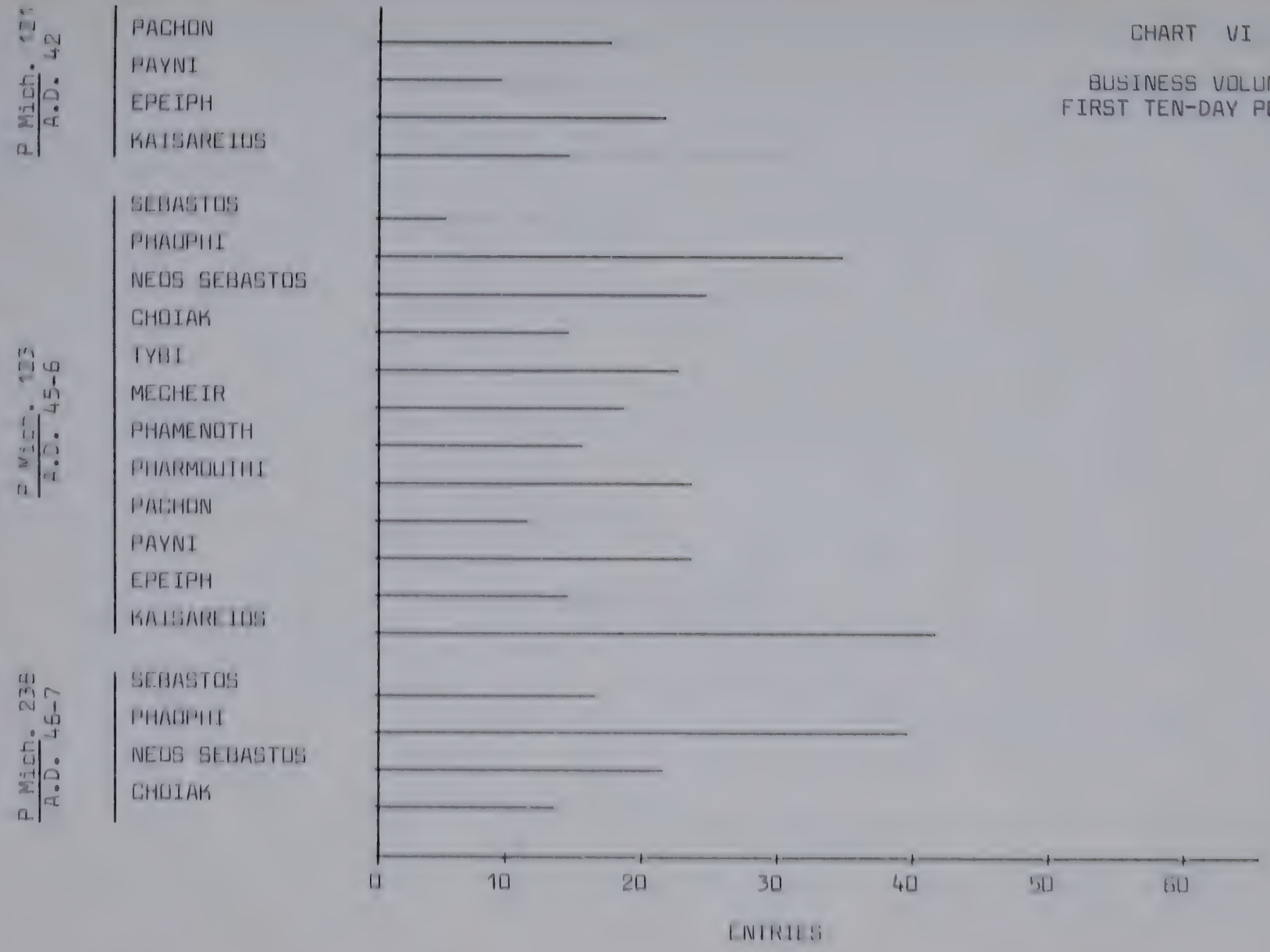


CHART VII

BUSINESS VOLUME:
SECOND TEN-DAY PERIOD

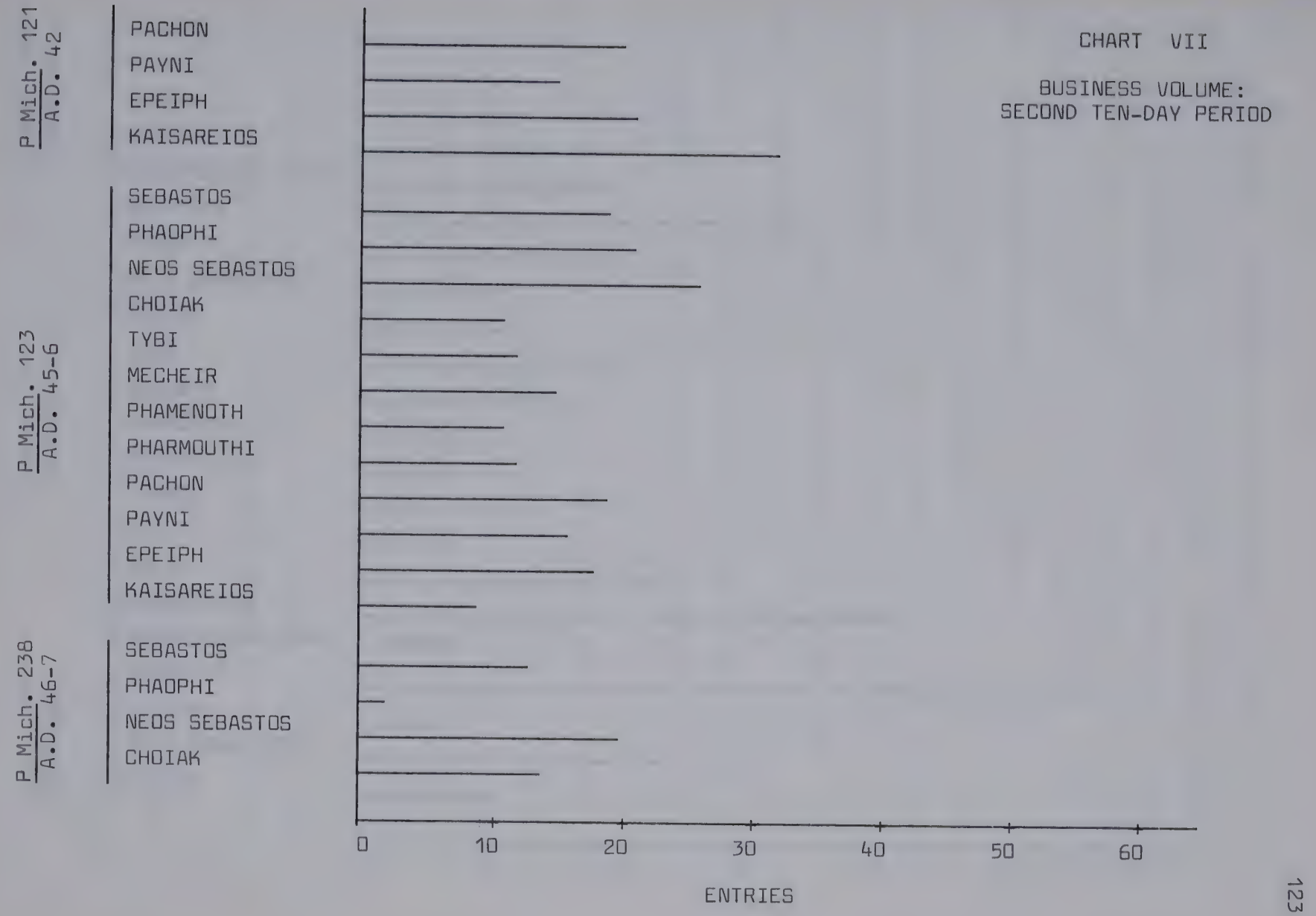
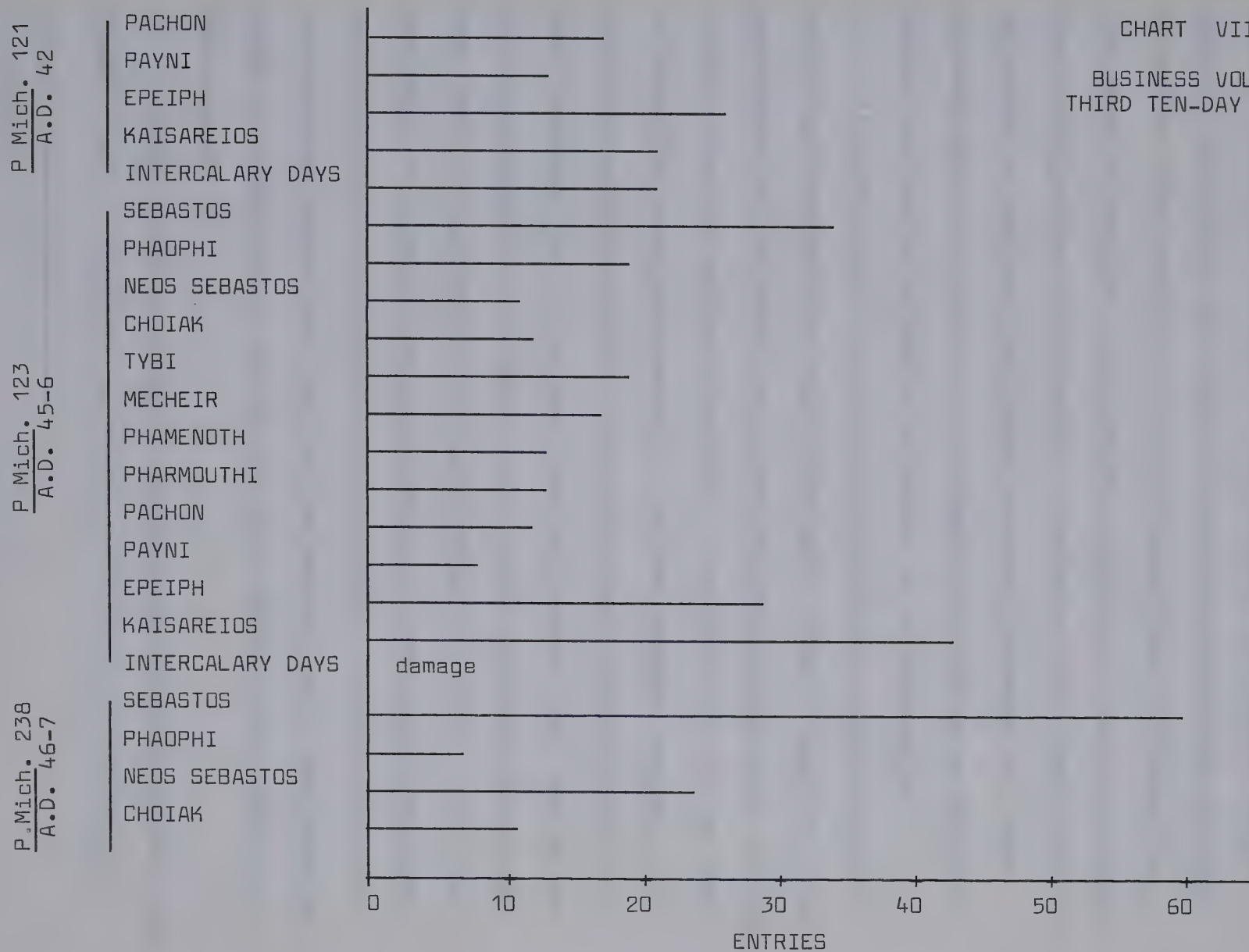


CHART VIII

BUSINESS VOLUME:
THIRD TEN-DAY PERIOD



to the grapheion to have their contracts drawn up, severely overworking Kronion and Eutychas in the process. The busiest period abated a little after the turn of the year, but continued at high volume for three months until the off season began in Choiak, the last month of the first quadrimester, when most of the contracts had been copied, entered and deposited. Thereafter, until about the last two months of the year, the grapheion's work proceeded at a more leisurely pace with the staff, presumably, catching up on the anagraphai and roll of originals to be sent to the metropolis.

The "off season" for the grapheion and the business life of the village extended from roughly the month Choiak through the second quadrimester to the month Epeiph when the people began again to flock to the office for the year's end work. The Tebtunites did not come to the office every quadrimester in the same numbers, however. In the first quadrimester of A.D. 45-6, they had 7 percent fewer contracts prepared than in the next year at the same time,[1] but in the last quadrimester of A.D. 45-6, the villagers contracted almost the same amount of business as four years before in A.D. 42. The close similarity in volume of the quadrimesters of these widely separated years could point to a general correspondence in volume of parallel quadrimesters, except that the last two months of A.D. 45-6 would be higher in volume were it not for the great damage to the papyrus in those months.

There is another perhaps fortuitous correspondence between the volume totals of the first two months of both A.D. 45 and the suc-

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1. Table 6.

ceeding year, A.D. 46. If the number of entries for the first two months are added up the total for A.D. 45 is 132 and that of A.D. 46 is 137, a difference of only 3 percent. Yet, there is a curious inversion of volume. More of the contracting parties postponed their visit to the grapheion for document preparation till Phaophi than in the next year when Sebastos was the month for the great influx of business. There is no obvious reason for this.

A little more than half the month was used for document registration.[1] Undoubtedly, Kronion and his staff needed time to prepare the multiple copies of each document, especially in the busier months like Kaisareios. Kaisareios in the two quadrimester examples has fewer days than average but each day has a higher volume than average. Perhaps the grapheion was "closed" for some days during the busy month to catch up on the work. The constant interruption of people coming to prepare their contracts would have slowed down the copy work. But these closed days could not have been prearranged, because generally there is no real pattern of closed and open days throughout the extant months. When he was overwhelmed with copies and drafts, Kronion may have communicated to the people that they should wait for another day.

The grapheion also operated on the Augustan anniversaries, the Sebastai, which Kronion noted in the year-long anagraphe somewhat inconsistently. Since the dates of these anniversaries show up less frequently on the average throughout the twenty extant months, it is possible that the Sebastai had some significance other than being

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1. 55 percent or an average of 16.6 days.

mere additions to the dating formula. This is particularly true for the date set aside for the Augustalia. However, the fact that the Sebastai dates appear less frequently as business days in this year may be due to chance alone. Lost anagraphai from lost years may have had more appearances of Sebastai.

The business of Tebtunis, as reflected in the business of the grapheion, was fairly stable between the years A.D. 42 and A.D. 46. The fact that the last quadrimester of A.D. 42 is similar in its distribution of volume per month and day as well as in the overall volume for the quadrimester indicates that in a period of four or five years there was stability in the economy of the village. The main anomaly is the high Kaisareios of A.D. 45-6 which may be the result of some unusual agricultural phenomenon.

If the economy of the village were stable over a period of four or five years, what would it have been over the whole thirty years of Kronion's tenure as nomographos? If we used statistical methods, we would consider the 360 months of Kronion's office as the "parent population" from which the twenty month period at our disposal would be the "sample." After finding the constants of the sample such as the mean, median, standard deviation, we could then estimate these constants for the parent population. So, using these twenty months one might be able to say, after all calculations were done and the constants found, that throughout all the thirty years from A.D. 25-6 to A.D. 56, the business volume of Tebtunis was similar to the available years. However, these twenty months

constitute only six percent of the parent population, which means that the sample is very small and therefore, less reliable. The probability that a small sample adequatly reflects the constants of the parent is much lower, than if we had a larger sample. The small sample, chosen randomly, could have been taken from a part of the parent population which does not represent the whole population.[1] The unreliability of a small sample is reinforced over a time span as long as thirty years. We could not expect homogeneity of business volume during this time and must, as a result, consider the data from the three anagraphai as merely suggestive of the level of the economy for the four or five years they cover.[2]

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1. Connolly and Sluckin, An Introduction to Statistics for the Social Sciences (London: Cleaver & Hume Press, Ltd., [1957]), pp. 78-80.
2. Frederick Mills, Statistical Methods (New York: H. Holt & Co., 1955), p. 104.

CHAPTER III

THE CONTRACTS

Introduction

It is not enough simply to present the statistics for the quantities of different contracts which were made during the second, sixth and seventh years of Claudius; we must ask questions about each contract to find out what it meant economically or socially to the people who entered into it. Each contract entry, abstract or subscription copy[1] does not provide the same sort of information, however, so that each contract type must be considered individually. Some types of contracts appear so infrequently in the anagraphai that it would be difficult to attach the proper evaluation to their distribution or numbers. In that situation, other things must be sought such as the social and/or economic status of the participants, the amounts of money or arouras of land involved, the reasons behind the use of the particular contract and any other data which can be extracted to add to the general knowledge about the economic life of the village.

It is generally agreed that life was hard for the Egyptian peasant under the Roman domination, but was the sixteen month period

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1. Since the anagraphe entries are so brief, it is necessary to turn to the eiromenon abstracts, or lacking those, to the full documents or subscriptions to discover the nature of the contract and to imagine its personal impact.

(covered by P Mich. II, 123 and V, 238) average in difficulty for the people or particularly bad for some reason? One cause of a difficult economic situation could be the failure of the Nile flood, which might result in the marked increase or decrease of certain types of contract or certain crops. The sixteen month period from Sebastos, A.D. 45 to Choiak, A.D. 46 is the main time to watch for any fluctuations, while the four month period in A.D. 42 can be used for comparison. A stable economic situation over the years from A.D. 42 to A.D. 46 would produce a similar volume for the various contracts, but if the conditions were not stable then there should be an obvious change in volume for at least a few of the types of transactions.

The transactions which are most likely to reflect the economic circumstances are the loans and leases: the latter, in their general volume and type of crop planted; the former in their numbers and distributions. The loans present a problem because there are two general varieties of loan. There is the direct loan or daneion and the indirect loan which was hidden in another contract. The prodomatic lease and the deposit are examples of indirect loans. Thus, before a final count of the loans can be made, it is necessary to detect the indirect loans in their hiding places.

This section, then, will deal with three different subjects: the specific data which can be found for a given contract, the social and economic impact upon the participants, and also the volume and distribution of the various types of contracts.[1] The main purpose

1. Not every contract that has an entry in the anagraphai can be studied since a few appear only once or twice. The service contracts, leases, loans, deposits, marriage agreements, divisions, sales, cessions, mortgages appear in sufficient quantities to be considered.

of this enquiry is to decide whether A.D. 45-6 was a year of severe economic conditions or whether it seems from the evidence to have been an average year.

The Leases

The Egyptian agricultural year of three seasons (summer, winter, spring), regulated by the annual flood of the Nile, controlled the economic life of Tebtunis as, indeed, it did of all Egypt. As we have already seen most of the grapheion's business volume occurred around the new year, that is, the height of the flood. Since the greater general volume would in any case produce a proportionally high number of any one contract, we would expect a large number of leases to appear in these months anyway. However, a disproportionately large number of leases appear in the last and early months of the year, since the lease (μίσθωσις) was the business transaction most directly affected by the flood.

The flood waters began to rise in mid-Payni (June) at Memphis, reached its height between September 5 - 9 and twelve days later began to subside rapidly so that by the beginning of Neos Sebastos (the end of October) the water in the Fayum canal was low and the Nile was in its original bed.[1] The water reached its height in the Fayum on Epeiph 30 (July 24).[2]

Generally, the Tebtunites had their leases drawn up at the beginning of the Egyptian year (Sebastos 1 is equivalent to our

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1. Bonneau, Crue du Nile, pp. 23-4.
2. P Tebt. III 787, lines 7-8.

August 29), especially during the first three months (Sebastos, Phaophi, Neos Sebastos). The seeding took place after the contract had been closed and the water had receded in early Choiak (November).[1] The lessees paid their rent after the harvest in Payni.[2] Previous studies[3] have shown that the first three months and the last month of the year were the lease making months. The Tebtunis data confirms this and adds further information about the other months, as well.

Before presenting the data, however, we must consider the different varieties of leases. The direct lease was one in which the lessee rented the land directly from its owner,[4] usually at the beginning of the year in which it was to take effect. It customarily stipulated the crop to be planted in each year, the amount of the rent, the duration of the lease, and who bore the tax burden. During the Roman period, one or two year leases were usual, three to four year leases, common, and longer ones on private land, rare. The lessor, in most cases, paid a greater part of the taxes while the lessee received a reduction in rent if he paid them all himself. The rent was paid after the harvest which began in Pachon (May); the type of crop dictated whether the rent was to be paid in money or in kind.[5]

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1. Waszinsky, Bodenpacht, I, p. 63.
2. Bonneau, Crue du Nile, p. 41.
3. Herrmann, Bodenpacht, p. 95. Also Waszinsky, Bodenpacht, p. 62.
4. This type of lease will be called "regular." All the leases to be discussed are regular leases.
5. Johnson, Roman Egypt, pp. 74-82.

Subleases, off season leases and prodomatic leases also appear in the Tebtunis registers and abstracts. Subleases were most often made on state land which had first been leased to public farmers (δημόσιοι γεωργοί) who in turn leased all or part of their holdings to someone else either because the burden of cultivating the whole plot was too great or because it was a way in which to make extra money.[1] An off season lease, made during the second quadrimester of the year was actually a sale of the crop. Some of these mid-year leases, however, were made up to five years in advance of the year in which they were to take effect.[2] These advance leases could also be made at the usual leasing time at the new year. A particular type of lease which was sometimes made several years in advance of its effective date was the prodomatic lease (μίσθωσις προδοματική) in which the rent was paid in part or in full before the harvest. Discussion of the prodomatic and off season leases will follow that of the regular leases.

Volume of all Leases

Table 22 shows that leases were entered in the anagraphai during the first four months of A.D. 45-6 (P Mich. II 123) than in the first four months of the next year, A.D. 46-7 (P Mich. V 238).[3] The volume decreased in the second year from the volume in the first year by 60 percent. The lease volume rises and falls within the

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1. Johnson, Roman Egypt, pp. 74-82. An example of a sublease is P Mich. V 313.
2. An example of such a lease is P Mich. II 121 recto, III, viii.
3. Table 22.

TABLE 22

LEASES AND THEIR DISTRIBUTION

Month	All Leases[a]		Prodomatic Leases[b]		Quadrimester Totals (All Leases)	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
Sebastos	18 (18)	28 (16)	0	8 (4)	77	48
Phaophi	34 (27)	12 (7)	2 (5)	2 (3)		
Neos Sebastos	22 (16)	5 (5)	4 (2)	0		
Choiak	3	3 (1)	1 (2)	1 (1)		
Second Quadrimester	P Mich. 123		P Mich. 123		P Mich. 123	
Tybi	9 (9)		0		30	
Mecheir	8 (7)		0 (1)			
Phamenoth	9 (5)		2 (2)			
Pharmouthi	4 (3)		1			
Third Quadrimester	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121
Pachon	7 (7)	16 (16)	0	0	60	51
Payni	8 (7)	5 (5)	0 (1)	0		
Epeiph	15 (12)	12 (11)	3	0 (1)		
Kaisareios	30 (29)	16 (16)	1	0		
Intercalary Days	..	2 (2)	..	0		

[a]The figures in parentheses indicate the number of regular leases.

[b]The figures in parentheses indicate the number of prodomatic leases in homology form.

quadrimester in A.D. 45-6 and falls from a high point reached in the first month of A.D. 46-7. Phaophi is the highest month in the curve in A.D. 45-6, where it is 89 percent higher than Sebastos; in the next year Sebastos is the highest volume month and it is 57 percent higher than Phaophi. This distribution is undoubtedly affected to some extent by the dispersion of the general volume for those months, but the over-all volume does not decrease so sharply from the first year to the second as do the leases.

The second quadrimester, as would be expected, is the lowest in lease volume with only thirty leases entered. The distribution of volume is almost equal in the first three months of the period but Pharmouthi is lower by about 50 percent from the other three months.

The final quadrimester of A.D. 42 (P Mich. II 121)is 18 percent lower in total lease volume than the one in A.D. 45-6. In the later year the volume exhibits a steady rise from Payni to Kaisareios, which is paralleled in the earlier year in the same months. In both periods, Epeiph and Kaisareios are the highest months for lease volume.

The main months of the year for lease-making, then, were the last two months, Epeiph and Kaisareios, of the old year and the first three of the new year with some minor variations in volume distribution. It is significant that over a four year period there is a variation of only 18 percent between the volume totals of the last quadrimester and that in the space of one year, the volume of the first quadrimesters should differ by 60 percent. What caused such a drop from A.D. 45-6 to A.D. 46-7 is not evident from these registers, but it has been suggested that there was a famine caused by an adverse

flood.[1]

Lease contracts make up 25 percent of all the contracts in A.D. 45-6 (P Mich. II 123);[2] 33 percent in the first quadrimester,[3] 16 percent in the second and 24 percent in the third. In the next year A.D. 46 (P Mich. V 238), the first quadrimester's lease volume is 20 percent of the business volume. In the final quadrimester of A.D.42 (P Mich. II 121), 21 percent of the business volume was composed of lease contracts. The average percentage of leases per quadrimester (based on the five extant) is 22.6 percent or 23 percent. Table 23 shows the percentages of leases per month as compared to the general volume.

TABLE 23

PERCENTAGE OF LEASE BUSINESS VOLUME PER MONTH

Month	P Mich. 123 (A.D. 45-6)	P Mich. 238 (A.D. 46)	P Mich. 121 (A.D. 42)
Sebastos	31	31	..
Phaophi	46	25	..
Neos Sebastos	36	8	..
Choiak	8	8	..
Tybi	17	..	..
Mecheir	16	..	..
Phamenoth	23	..	..
Pharmouthi	8	..	..
Pachon	17	..	30
Payni	17	..	13
Epeiph	25	..	18
Kaisareios and Intercalary Days	29	..	20

1. A discussion of the evidence and opinions on a famine in Egypt in the year A.D. 45-6 will appear at the conclusion of this chapter.
2. Chapter II, Table 6.
3. Chapter II, Table 7.

The Regular Leases

The regular leases make up 84 percent of all the leases of the year A.D. 45-6, 60 percent of the leases in the first quadrimester of A.D. 46 and 98 percent of the leases in the last quadrimester of A.D. 42.[1] Since a greater number of leases are regular, it remains to see what a regular leasing situation entailed for the contracting parties. However, with few exceptions, the contracts which correspond to the anagraphe entries are lost, so that we cannot gain more information than appears in the entries. For P Mich. II 121, however, we have the abstracts for some of the lease contracts listed in the register and from these can build up a slightly fuller picture of the leasing situation in Tebtunis: the nature of the leases, the people who made the leases and possibly the reasons for making the leases. There are fifty-one leases in P Mich. 121 verso (the anagraphe), fourteen of which are found as abstracts in the eiromenon; there is also one rent receipt and one eudokesis (εὐδόκησις) based on a lease. Most of the abstracts date only from Pachon, with one from Payni, because the eiromenon is incomplete. One of the leases appears in an abstract in the eiromenon but has been omitted from the anagraphe.[2] Of the fourteen leases, ten involve datio in solutum (antichresis) or prodoma. The other four regular leases fit into the pattern of leasing current in that day.

The first abstract,[3] entered on Pachon 5, is an example of a

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1. Table 22.
2. P Mich. II 121 recto, III xiv.
3. P Mich. II 121 recto, I, v.

sublease, in this case of 4 arouras of public land (δημόσια ἐδάφη) on the Great Road. Generally, leases stipulated the crop to be planted, the rent, time of payment, the responsibility for the payment of taxes and other public charges. In this sublease, Marsisouchos, the lessee, was to pay the rent in money, although the crop, wheat, usually dictated payment in kind. Psenkebkis, the lessor, assumed the responsibility of paying his rent to the state in kind as well as the public charges.

Leases on public land were often, but not always compulsory, binding tenant farmers to the land as virtual serfs.[2] There is no way of telling under what conditions Psenkebkis took the original lease, but it is reasonable to expect that some of the public land in Tebtunis, as elsewhere, was parceled out in forced leases, the tenant could not work it alone and consequently, sublet part of it. Other public land leases were held by partnerships which gave out subleases for profit.[3]

Aside from demosia edaphe, Tebtunites could lease another type of public land, plots from the Claudian ousia which was located near Tebtunis. Usiac land was held by members of the imperial family in Egypt and other provinces.[4] On Pachon 12, Galates and his partner leased to Elis and her kyrios, Lysimachos, son of Lysimachos, 4-1/2 arouras which were part of this ousia near Tebtunis.[5] Ousiai were

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1. P Mich. II 121 p. 25, note.
2. Johnson, Roman Egypt, p. 72.
3. Further discussion on both subleasing and partnerships will appear later in this section.
4. Rostovtzeff, SEHRE, p. 669.
5. P Mich. II 121 recto II, ii.

worked by free hired laborers known as apolysimoi, but there is no indication that Galates and his partner were among these. Possibly they were tenants who leased a share of the estate and whose own property could be held as surety for fulfillment of the lease.[1] The sublease would have freed them from some of the labor and may have gained them some profits.

Another regular private lease which differs from the two already mentioned is that of Herodes, son of Herakleides, who leased two plots of land to Onnophris, son of Kolluthos.[2] This lease is interesting for its rental arrangements and for the identity of the lessor, Herodes.

The first plot of land leased to Onnophris was a katoikic allotment of 7-1/2 arouras plus 1/11 and the second, 2-1/2 arouras, had formerly been an olive grove. The total amounted to 10 plus 1/11 arouras but the fraction was ignored in reckoning the seed allotments and in the anagraphe entry. The annual rental for the two parcels was to be paid in kind during the first and third years and in money in the second and final years. The rental differences in the alternate years can be explained by the rotation of crops raised. Wheat, always paid in kind, was sown in the first and third year and in the other two years it was probably grass or other fodder for livestock, a cash rental crop. The rent varied because the land tax varied with the crop raised.[3]

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1. Johnson, Roman Egypt, pp. 79-80.
2. P Mich. II 121 recto IV, ii.
3. P Mich. II 121 recto p. 66, note 3. Also Henig, Bodenpacht, pp. 3-5.

The rent in kind for the first and third years was 110 artabs of wheat per year, a total of 220 artabs of wheat. The rent per aroura, then, was 11 artabs of wheat. About twelve years later in A.D. 54, 10 artabs per aroura was considered to be a profitable rent,[1] so that 11 artabs must have been even more profitable.

Part (7-1/2 plus 1/11 arouras) of the land leased by Herodes to Onnophris was katoikic land which required a tax of 1 artab per aroura to be paid to the state.[2] There was also a surtax (prosmetroumena) of 1/7 on katoikic land in the Arsinoite nome.[3] Out of the 220 artabs collected by Herodes in the two years, 16-1/2 artabs would go to the state (8-1/4 artabs per year) and leave Herodes with a "profit" of 203-1/2 artabs. This calculation excludes additional storage or delivery fees and supposes that the lessee paid the other charges such as the naubion and artabeia, but this particular lease abstract does not assign these taxes to either party.

It is almost impossible to evaluate the "profit" of Herodes because we do not know the worth of the wheat which was handed over as rent. In A.D. 46, wheat sold for about 8 drachmas per artab. If in A.D. 42, the time of this lease, wheat sold on the retail market for the same price, then Herodes gained 1,628 drachmas worth of wheat,[4] or 88 drachmas per aroura leased. But the fact that this

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1. Johnson, Roman Egypt, p. 81 and pp. 161-2, no. 91.
2. Wallace, Taxation in Egypt, p. 13.
3. Ibid., p. 38.
4. After the tax is subtracted, there are 101-3/4 artabs left for the lessor, 203-1/2 for two years; 203-1/2 artabs at 8 drachmas each yields 1,628 drachmas.

lease was to extend over a four-year period[1] argues against Herodes receiving 1,628 drachmas worth of wheat. The price of wheat fluctuated yearly, and even monthly, depending on supply. According to the evidence of the grapheion accounts (A.D. 45-6) an artab of wheat cost Kronion, the nomographos, 8 drachmas in Sebastos.[2] The price of wheat seems also to have fluctuated with the dealer. The state granary received 8 drachmas per artab of wheat[3] while private sellers gave an artab and a fraction for that price[4] or even a greater reduction to 5-7/10 drachmas per artab.[5] Consequently, there is no way to estimate what this amount of rent in kind was worth in money.

Whatever he earned on this transaction, Herodes, son of Herakleides, the lessor, was no stranger to larger amounts of money. This Herodes may be identified with Herodes, son of Herakleides the Younger, one of the brothers in the large and wealthy family that figures in many documents of this period in Tebtunis and which also supplied a nomographos for the village two generations later.[6] The abstract mentions that Herodes and his brothers[7] had previously sold some vacant lots to Onnophris. This line indicates not only that

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1. The first year, to be paid in kind, would cover A.D. 42-3; the second, a cash crop, A.D. 43-4; the third year, another payment in kind, A.D. 44-5 and the fourth year, a cash crop, A.D. 45-6.
2. P Mich. II 127, line 10.
3. P Mich. II 127, lines 13 and 15-16.
4. P Mich. II 127, lines 10-12 and 37-38.
5. P Mich. II 127, line 12.
6. The family of Herakleides the Younger is discussed in Chapter I and below.
7. P Mich. II 121 recto IV, 2, line 3.

Herodes had several brothers and that he engaged in business deals with them, but also that they had land to both rent and sell. The sons of Herakleides the Younger did have a great deal of land, much of it katoikic land in miscellaneous parcels.[1] One katoikic parcel in their possession (about six years later in A.D. 48) was 7-1/2 arouras, located near Tebtunis.[2] Also among their real property were two vineyards of 3-7/8 arouras and 2 arouras respectively.[3] Neither of those could have supplied the second plot mentioned in this leasing transaction because both are said to be flourishing, while the one in the lease abstract has been cut down. The evidence for the identification of this Herodes and the wealthy Herodes is perhaps tenuous, but nevertheless, possible.

The regular private leases found among the grapheion abstracts show similarities to other leases of the first century in their conditions and stipulations, but in addition, exhibit many variations among themselves as to types of land leased and the leasing situation in general. The prodomatic leases are equally variable on certain points.

The Prodomatic Leases

In most leasing situations, the lessee paid for the privilege

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1. P Mich. V 326 (A.D. 48) is a division of property (diairesis) among the brothers. This is discussed below in the section on divisions.
2. P Mich. V 326, line 20.
3. P Mich. V 326, lines 43-44 and lines 32-33. The land divided by the Herakleides family in P Mich. 326 was all inherited land which the brothers seem to have controlled before the diairesis was made. They could have leased their jointly held land. Also there is no reason why they could not have owned other land, not inherited from their father and have sold or leased that. This type of land would not have appeared in the diairesis.

of using the land by handing over a part of the harvest or a part of the revenues. In this way both the lessor and the lessee profited; the former shared the produce in exchange for the use of his land and the latter, in exchange for his labor. In a prodomatic lease the situation was different because the lessor received payment for his land before the land was used, the crop grown, and the harvest taken in. He, therefore, did not share the crop or its revenues as before.

The return on a prodomatic lease varied according to the circumstances. The lessee could be the worse off for this type of arrangement because he had to surrender his capital before the harvest was in and harvests could be bad. A lessor, however, would profit from this type of lease in almost every situation. If the lessee's capacity for work was questionable, the lessor was assured of his own payment without waiting for the harvest.[1] Another explanation for the prepayment is that the lessor needed money to pay his taxes, for example, and asked for the rent in advance. In this case, the lease was only a fiction and the prepayment was really a loan, with the lessor as debtor and the lessee as creditor.[2] Often the prepaid prodomatic lease was also antichretic.

The prodomatic lease became antichretic if the loan were made under a previous contract which the lessor-debtor could fulfill only through a lease, whether forced or voluntary, of his land. The prodomatic lease in this instance represented datio in solutum in which something such as labor, land or residence was substituted for what

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1. Herrmann, Bodenpacht, p. 231.
2. Herrmann, Bodenpacht, p. 232.

had actually been borrowed. Not all prodomatic leases involved a previously contracted loan. In some cases the early payment was the loan itself.[1]

Evidence which points to the prodomatic lease involving a loan is the fact that the lessor is called a "Persian of the epigone" (Πέρσης τῆς ἐπιγονῆς) in most of the prodomatic lease abstracts. This term is used as the status designation of a debtor.[2] The lessor was then a debtor who performed the labor on his own land and thus worked off the debt or its interest. He then handed over the produce or the revenues to the lessee-creditor.

Although there have been many conflicting ideas as to the true economic and legal meaning of the prodomatic lease, a few things stand out with some certainty. The prodomatic leases are limited in time and place. They appear in the Arsinoite nome during the first century and the first half of the second century A.D. Another peculiarity of these leases is that in many cases the lease involves a sublease of public land.[3] This latter characteristic is true of some of the Tebtunis prodomatic leases too. Before investigating the attributes of these transactions, it is necessary to discuss their volume and distribution.

A group of leases which are not designated as "prodomatic"

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1. Ibid. No certain criteria have yet been determined to distinguish the different varieties of prodomatic lease from each other.
2. J.G.Tait," Πέρσης τῆς ἐπιγονῆς." Archiv, 7 (1924), pp. 175-182 and F.Pringsheim,"Die Rechtsstellung der Πέρσης τῆς ἐπιγονῆς ," ZSSRA 44 (1924), pp. 396-526.
3. Henig, Bodenpacht, p. 36.

but which should be included in that category is composed of those leases expressed in homology form (ὁμολογία μισθώσως) instead of the usual protocol form; the objective homology form is used only for prodomatic leases.[1] When we add these homologies to the prodomatic leases, the percentage of these in comparison to the regular leases in some instances increases a great deal.

In the first quadrimester of A.D. 45-6 there are seven prodomatic leases out of a total of seventy-seven leases.[2] This is 9 percent of the total. When the additional nine homologies are added, the prodomatic leases make up 21 percent of the total. These pre-paid leases are entered in the last three months of the quadrimester, particularly Phaophi and Neos Sebastos which are the two highest months among the four. In the next year, the prodomatic leases constitute 23 percent of a lower total lease volume and 40 percent with the homologies added. In this quadrimester the prodomatic leases occur in the first, second and fourth month of the period with the first month highest in volume.

The second quadrimester of A.D. 45-6, lowest of all in lease volume, has six prodomatic leases and homologies which make up 20 percent of the lease volume of that quadrimester.

The final quadrimester of A.D. 45-6 has five prodomatic leases and homologies which are 8 percent of the total of sixty leases for those months. The prodomatic leases are found in the last three months of the quadrimester. As for the last quadrimester of A.D. 42,

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1. P Yale 67, introduction, p. 215.
2. See Table 22 for all leases.

it seems that, other than the one homology in Epeiph, there are no prodomatic leases at all because none of the leases are called prodomatic in the register. However, the lease abstracts preserved for Pachon and Payni show that ten of the leases or 20 percent are actually prodomatic/antichretic.[1] It now remains to examine the abstracts in order to discover the characteristics of these prodomatic leases and to see who entered into them.

Two of the prodomatic leases are examples of the kind which were made some time in advance and which extended over a long period of time. These two leases, entered on Pachon 16, A.D. 42, were to go into effect two years later and were to run five years each. The same people were involved in both these leases, Akousilaos as lessor and Eutychos or Eutychos and his mother, Tamarron, as lessee. The public charges were divided up between the two parties in the same way in both leases: Akousilaos paid the arithmetikon and Eutychos paid the naubion, artabeia and kataphyteia (or kataphyta).[2] The first lease is for 5 arouras of a 6-aroura katoikic allotment[3] and the second is for γῆ σπορίμη,[4] 5 arouras of another 6-aroura katoikic allotment.

There are five prodomatic leases which are also subleases. One of these involves the subleasing of 3 arouras of usiac land.[5]

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1. The certain prodomatic leases in P Mich. II 121 recto are: II, i, v, vi; III, viii, xi, xiv; IV, v. Less certain are: I, xiv; II, vii; III, x. The only three which involve neither subleases nor extraordinary circumstances are: III, xi; III, xiv; IV, v.
2. Kataphyteia (or kataphyta) may be one of the additional taxes on katoikic land. P Mich. II 121 recto I, xiv, note on line 2.
3. P Mich. II 121 recto I, xiv.
4. P Mich. II 121 recto II, i.
5. P Mich. II 121 recto III, x.

The 3 arouras are part of the imperial estate located outside Tebtunis. Such estates were worked by tenants, like Nikomedes, the lessor in this case, or apolysimoi, the free hired workers.[1] The most interesting point in this lease is that Nikomedes held katoikic land, 2 arouras of which he leased to Orseus, son of Orseus at this time. Tenants of the emperor were not limited in the type of land that they could hold.

In addition to usiac land, three subleases of public land (δημόσια ἔδάφη) also appear in the abstracts. Two of these[2] stipulate that fodder crops must be planted for pasturage, the third[3] requires barley as the crop. One plot that is rented consists of 14 arouras which form part of the public land allotment held by the lessor, Pakebkis, son of Horus. This amount of land is far above the average number of arouras leased per month.[4] It would be interesting to know the extent of Pakebkis' holdings from the state. Obviously, some parcels of public land, whether voluntarily or involuntarily leased by Tebtunites, could be very large. The final sublease is made for what appears to be private land and some peculiarities exist in the debtor-creditor relationship of the contracting parties.

The lessors are usually styled "Persians of the epigone" because they hold debtor-status. However, of these five prodomatic

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1. See above pp. 43-44 for the apolysimoi.
2. P Mich. II 121 recto II, v and III, viii.
3. P Mich. II 121 recto II, vi.
4. See below Table 25. Only one month, Phamenoth of A.D. 45, comes close to this with an average of 13-6/10 arouras per lease. The distribution in that month is badly skewed by one large lease amount of 52-1/2 arouras.

leases, one has the lessee as Persian[1] and another has neither party as Persian.[2] Scribal omission could account for the latter discrepancy, and error is certainly possible in the complicated situation seen in the former lease.

Apollonios, son of Herakles leased to Orsenophis fils 3 arouras of land which he (Apollonios) already held from Orsenouphis père under a previous prodomatic lease. The scenario for this sequence of transactions would be: Orsenouphis père leased 3 arouras to Apollonios; because it was a prodomatic lease, the lessor presumably received the rental in advance (possibly as a loan), worked the land and gave the revenues or fruits to Apollonios. Later, Apollonios leased the 3 arouras back to the same family, this time, however, to Orsenouphis fils. Apollonios should have received the rent in advance, worked the land and have given the revenues or produce to Orsenouphis. In both cases, if the advance payment of rent were a fictitious loan, then the labor expended to bring in the harvest would work off the interest on the loan, the principal of which would have to be paid at another time. Perhaps Orsenouphis fils was here paying off the principal on the previous loan in a novel way by making a prodomatic lease with Apollonios. If Orsenouphis himself were confused as to his status in this situation, it would be no wonder that the scribe who drew up the document was too.[3]

Another prodomatic lease with several anomalies is the one of

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1. P Mich. II 121 recto, II, vii.
2. P Mich. II 121 recto, III, x.
3. P Yale 67, introduction, p. 211.

Nikomedes, son of Phanias with Apollonios, son of Herakles. It appears to be a normal prodomatic lease;[1] the unspecified payment was made in advance. However, neither party is designated as "Persian of the epigone" as usual in these leases. In addition, the lessor usually does the work on his own land and the lessee supplies the seed, but in this case the lessee, Apollonios, was to do the work and supply the seed. An explanation for these anomalies could be that the contract does not involve antichresis as the others do, but perhaps a prepayment of rent as security that the work will be done.[2] This kind of prodomatic lease may have been more unusual than the antichretic version and confusion arose as to which party was the real debtor when the document was prepared.

But the lessee in this case, oddly enough, is the same Apollonios who appears as the lessor in the contract with Orsenouphis.[3] In both leases Apollonios is said to be son of Herakles and is between thirty-two[4] and thirty-three[5] years of age. While the distinguishing scars are different,[6] the identity of name, age and patronymic is sufficient to suggest the two men are the same. Apollonios, then, leased 3 arouras to Orsenouphis on Pachon 16 and <u>received the rent in advance</u>. Nine days later on Pachon 25, Apollonios leased 5 arouras from Nikomedes and <u>paid the rent in advance</u>. A possible, but

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1. <u>P Mich</u>. II 121 recto, III, x and introduction, p. 56.
2. Herrmann, <u>Bodenpacht</u>, p. 231.
3. <u>P Mich</u>. II 121 recto, II, vii.
4. <u>P Mich</u>. II 121 recto, III, xi.
5. <u>P Mich</u>. II 121 recto, II, vii, i.
6. His scar is found above the right eyebrow in II, vii and above the right shin in III, x.

improbable, explanation for this odd situation is that Apollonios needed money in order to pay Nikomedes and forced the lease upon Orsenouphis fils whose family was already in his debt.

These two leases were not the only business that Apollonios had with the grapheion. He acted as scribe for Petesouchos, son of Petesouchos, in another prodomatic lease[1] on the same day, Pachon 25, that he made his lease with Nikomedes. And on this day, too, his father, Herakles,son of Aphrodisios, gave to the same Nikomedes, son of Phanias, 13-1/2 artabs of wheat which was to be paid back in the month of Epeiph.[2] Apollonios, son of Herakles, son of Aphrodisios, acted as scribe for his father in this transaction.[3]

Herakles, son of Aphrodisios, was a cattle grazier who figures in an acknowledgement by the elders of the public cultivators to Herakles and his partner (?) Orses, son of Phasos, of their satisfaction that the cattle graziers would deposit the rental for half the dry pasture land under the control of the public cultivators.[4] If Herakles were a cattle grazier, his son, Apollonios, may have been too. The prodomatic lease which Apollonios made with Nikomedes prescribes a fodder crop for sheep pasturage for one plot and grass for the second plot. The lease between Orsenouphis and Apollonios mentions no crop, so there is no further indication that he was a grazier. Although he was literate enough to act as a scribe for Petesouchos, he was probably not a "professional" scribe like

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1. P Mich. II 121 recto, III, xi.
2. P Mich. II 121 recto, III, xiii.
3. P Mich. II 121 recto, III, xi, note 2 and III, xiii, note 2.
4. P Mich. II 121 recto, IV, xii.

Ptolemaios, son of Chairemon,[1] but acted in the capacity of scribe simply because he was at the grapheion for his own business and stepped in to fill a temporary gap in the writing staff there.

Apart from this Apollonios, another Tebtunite appears in more than one prodomatic lease and in each instance as lessee. In A.D. 31, Marisouchos, son of Marepsemis, leased 7 arouras of land from Marepkamis, son of Marepkamis, who received the rent in advance.[2] Five years later Marsisouchos subleased 5 arouras of public land from Marepsemis, son of Marepsemis with the rent paid in advance again.[3] Finally, Hatres, son of Phanes, subleased 5 arouras of public land near the Great Road to Marsisouchos in A.D. 42.[4] Apparently, these three leases were forced by Marsisouchos on the lessors.[5]

In summary, we can say that of the ten prodomatic leases in P Mich. II 121, 50 percent are subleases, usually for public or usiac land. Fodder crops are specified in 60 percent of the leases and cereal crops in only 20 percent. Occasionally, there are inconsistencies in the status designation of the debtor, probably caused in these instances cited by confusing legal situations or scribal error. Some of the people who contracted prodomatic leases did so on more than one occasion. Most of the prodomatic leases were entered in the first quadrimesters, and the fact that 40 percent of the leases of the first quadrimester of A.D. 46-7 are prodomatic could indicate

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1. For Ptolemaios, see Chapter I.
2. P Yale, 67.
3. P Princet., 146.
4. P Mich. II 121 recto, III, x.
5. P Yale 67, introduction, p. 211.

a greater need for cash than the year before.[1]

Off-Season Leases

Some leases were made during the "off season," that is, the months Choiak to Pharmouthi. The anagraphai entries show that Choiak was the lowest month for leases.[2] This is not surprising since Choiak was the month for planting (the end of October). The cultivators would be busy on their land and all the leases for the beginning agricultural season would have already been closed, unless there were extraordinary circumstances. Tybi to Pharmouthi were the months of the "dry" season when the crops grew and the only leases made were either fictitious ones to sell the season's produce[3] or advance leases for the next year or further in the future. Some of these advance leases were also prodomatic. Table 24 presents the data for the number of leases made during the off-season.

The striking number of regular leases in Tybi and Mecheir would lead one to think that these were crop sales that took place when the parties to the fictitious lease saw that the flood height had assured a good harvest. However, both prodomatic leases and regular leases were used for sales of produce,[4] so it is difficult to distinguish between an advance lease and a crop sale from the data in Table 24.

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1. See Conclusion below for further discussion of the economic significance of the prodomatic leases.
2. See Table 22.
3. Herrmann, Bodenpacht, p. 234.
4. Ibid.

TABLE 24

OFF-SEASON PRODOMATIC AND REGULAR LEASES

Month	P Mich. 123 (A.D. 45) Prodomatic[a]	Regular	P Mich. 238 (A.D. 46) Prodomatic[a]	Regular
Choiak	3	-	2	1
Tybi	-	9	-	-
Mecheir	1	7	-	-
Phamenoth	4	5	-	-
Pharmouthi	1	3	-	-

[a]Leases in homology form have been counted as prodomatic leases, See above Table 22.

Land Amounts and Crops

Many, but not all, anagraphe lease entries specify the number of arouras and/or the crop to be planted. Occasionally, the land type, such as temple land, is indicated too. Table 28[1] presents the particulars on all the leases in the three extant anagraphai.

Amounts of Leased Land

It is difficult to find an accurate average number of arouras per lease because the scribes were inconsistent and, in the three registers, occasionally left out the amount of land designated in the original contract. Any average, then, will be a suggested average gained from the available material rather than a real average. Table 25 presents the figures for the average number of arouras per lease based on only those leases which specify the amount of land.

1. Table 28 p. 163.

TABLE 25

AVERAGE NUMBER OF AROURAS PER LEASE BY QUADRIMESTER

FIRST QUADRIMESTER

	P Mich. 123 (A.D. 45-6)			P Mich. 238 (A.D. 46)		
Month	Entries[a]	Total[b]	Average[c]	Entries[a]	Total[b]	Average[c]
Sebastos	15	76.25	5.68	16	95.50	5.97
Phaophi	25	107.75	4.31	6	24.75	4.13
Neos Sebastos	18	101.25	5.65	4	17.50	4.38
Choiak	1	2.00	2.00	3	5.50	1.83

SECOND QUADRIMESTER

	P Mich. 123 (A.D. 45-6)		
Month	Entries[a]	Total[b]	Average[c]
Tybi	7	50.00	7.14
Mecheir	6	33.00	5.50
Phamenoth	7	94.25	13.46
Pharmouthi	4	33.75	8.43

THIRD QUADRIMESTER

	P Mich. 123 (A.D. 45-6)			P Mich. 121 (A.D. 42)		
Month	Entries[a]	Total[b]	Average[c]	Entries[a]	Total[b]	Average[c]
Pachon	3	13.50	4.50	13	92.00	7.08
Payni	4	21.00	5.25	4	26.00	6.50
Epeiph	11	51.00	4.63	8	37.50	4.69
Kaisareios[d]	17	92.25	5.42	14	108.83	7.77

[a]Number of entries specifying land amounts.

[b]Total number of arouras specified for month.

[c]Average number of arouras per lease, based on extant material.

[d]Kaisareios figures include those for intercalary days.

Land Types

There are several designations used to describe the land parcel leased. Four of these designations describe the ownership or conditions of ownership of the land: katoikic land (κατοικικὴ γῆ) or kleros (κλῆρος), originally given out to military settlers during the Ptolemaic period; temple land (ἱερὰ γῆ), formerly owned by the priests, but in the Roman period merely worked by them; public land (δημόσια γῆ), also called (ἔδαφος), formerly royal land, now owned by the state and leased out to groups of tenants, single tenants and entrepreneurs; usiac land (οὐσιακὴ γῆ), owned by the members of the imperial family and leased out to tenants in the same manner as public land.[1] Other land designations describe the condition of the land or the crop planted: vacant lot (κενὸς νόμος) or (ψιλὸς τόπος), a plain (πεδίον), pasturage (νόμος), garden (παράδεισος), reed bed (φλῶς), newly planted vineyard (νεόφυτος ἀμπελών).

Sometimes it is not land which is leased, but a building: two bath buildings,[2] one granary,[3] a house,[4] and an outhouse or farmstead.[5] There are also leased animals,[6] and machinery.[7]

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1. Johnson, Roman Egypt, pp. 74-82.
2. P Mich. II 123 recto XIII, 27 and 121, verso VII, 12.
3. P Mich. II 121 verso, II, 19.
4. P Mich. II 123 recto XVII, 6.
5. P Mich. II 123 recto XI, 24.
6. P Mich. II 123 recto VII, 17. The fee for rental of oxen was 240drs.
7. P Mich. II 123 recto XI, 11- an oil press.

Designations of land parcels as to conditions of ownership (such as katoikic or kleruchic land), use (such as a vacant lot), and types of crop (a vineyard, for example) are seldom given in the brief anagraphe entries, particularly in P Mich. V 238; the other two anagraphai have more designations of land types. The taxing categories such as watered land and unwatered land never appear in these registers. Table 26 summarizes the number of each type of land specified in the anagraphe entries for each quadrimester. Land designations found in the eiromenon, as well as the anagraphe for P Mich. II 121 verso, are included in the counts.

Crops

The naming of the crop to be planted under a lease contract occurs as infrequently as the naming of land types and amounts of land, yet there are two crops commonly mentioned where there is any designation of crop at all; these are chortos and chloron. Chortos (χόρτος) and chortonome are varieties of hay. These two along with arakos, a legume, are the usual fodder plants mentioned in the anagraphe entries and abstracts. Chloron and chlora is a generic term for green food plants such as lentils (φακός), wheat (πυρός), barley (κριθή) and foodstuffs in general (σῖτος).[1] Other crops found are reeds (καλαμία) and clover (λώτινον or λῶτος). Chortos and chloron along with vineyards and pastures[2] are the four most common crops. Table 27 lists the number of entries each month

1. W. Westermann, "The Dry Land in Ptolemaic and Roman Egypt," Classical Philology 17 (1922), pp. 21-36.
2. Since the crops are self-explanatory for these land types, they are included among the crops.

TABLE 26

LAND TYPES BY QUADRIMESTER

FIRST QUADRIMESTER - P Mich. II 123 (A.D. 45-6)		Number of Entries
Vineyard	(ἄμπελος)	2
Bearing greenstuffs	(χλοροφόρος)	1
Vacant lot	(κενὸς νομός)	1
Pasture	(νομός)	3
Garden	(παράδεισος)	2
Plain	(πεδίον)	2
Reed-bed	(φλῶς)	2
Temple land	(ἱερὰ γῆ)	1
Garden	(κηπουρικὴ γῆ)	1
Katoikic land	(κατοικικὴ γῆ)	1
Productive	(προσοδικὴ γῆ)	1
	P Mich. V 238 (A.D. 46)	
Garden	(παράδεισος)	2
Kleros	(κλῆρος)	5
Garden	(κηπουρικὴ γῆ)	1
Vineyard	(ἄμπελος)	3
SECOND QUADRIMESTER - P Mich. II 123 (A.D. 45-6)		
Reed-bed	(φλῶς)	1
Vineyard	(ἄμπελος)	1
THIRD QUADRIMESTER - P Mich. II 123 (A.D. 45-6)		
Vacant lot	(κενὸς νομός)	1
Vineyard	(ἄμπελος)	2
Pasture	(νομός)	1
	P Mich. II 121 (A.D. 42)	
Pasture	(νομός)	5
Usiac	(οὐσιακὴ γῆ)	2
Katoikic land	(κατοικικὴ γῆ)	2
Public land	(δημόσία γῆ)	2
Public land	(δημόσιον ἔδαφος)	7
Temple land	(ἱερὰ γῆ)	2
Kleros	(κλῆρος)	4
Garden	(κηπουρικὴ γῆ)	1

TABLE 27

CROP DESIGNATIONS BY MONTH

FIRST QUADRIMESTER

P Mich. II 123 (A.D. 45-6)

Month	Chortos	Cloron	Ampelon	Nomos	Other[a]
Sebastos	0	7	1	1	1
Phaophi	10	10	0	2	2
Neos Sebastos	2	3	1	0	0
Choiak	2	5	0	1	1

P Mich. V 238 (A.D. 46)

Sebastos	3	0	0	1	2
Phaophi	2	0	0	0	0
Neos Sebastos	0	0	0	0	0
Choiak	0	0	0	0	0

SECOND QUADRIMESTER

P Mich. II 123 (A.D. 45-6)

Tybi	2	5	0	0	0
Mecheir	1	2	1	0	0
Phamenoth	0	1	0	1	0
Pharmouthi	0	0	0	0	0

THIRD QUADRIMESTER

P Mich. II 123 (A.D. 45-6)

Pachon	0	1	0	0	0
Payni	0	0	0	0	0
Epeiph	4	1	1	0	0
Kaisareios[b]	6	1	1	0	0

P Mich. II 121 (A.D. 42)

Pachon	2	4	0	3	5[c]
Payni	0	0	0	0	0
Epeiph	0	0	0	1	0
Kaisareios[b]	1	0	0	0	0

[a]Other crops include lotus (clover?) and aracus.

[b]Kaisareios includes intercalary days.

[c]P Mich. 121 is particularly lacking in crops specifications. The data from Pachon has been supplied from the abstracts.

which specify the crop.

Conclusion

The difference between the number of all leases made in the first quadrimesters of A.D. 45 and A.D. 46, the vastly larger number of prodomatic leases in the later year and the predominance of fodder crops suggests that the flood of A.D. 45-6 or the year before exceeded expectations or did not meet them. Whatever the condition of the flood, it caused people to make more prodomatic leases. Our reading of the economic conditions of the time, then, rests partially on the economic implications of the prodomatic lease.

There are several possible situations behind the prodomatic lease. First, a previously existing debt could be eliminated at the closing of the lease contract. This would leave the lessee-creditor in the position of economic inferiority because he would have to risk a bad harvest like any other lessee.[1] However, most of the Tebtunis prodomatic leases were made at a time of the year when the contracting parties would already know the height of the flood and as a result, could estimate the quality of the harvest. In addition, chortos, a fodder crop, was the predominant crop during these years of A.D. 42 and 45-46 and it involved less of a risk than the cereals.

If, on the other hand, the debt was made at the time of the lease, then the lessee-creditor would be in a favorable position. He would receive the antichresis of labor, the harvest, and

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1. Henig, Bodenpacht, pp. 39-40.

eventual repayment. Or, if these leases concern a true advance payment, then the lessee worked because the lessor forced payment from him.

The idea behind the prodomatic lease embraces two more possibilities involved with subleases. If most of the land subleased through a prodomatic lease were state land, then the lessor might be compelled to take on a prodomatic lease because he needed money to fulfill his tax obligations to the state. The picture of the peasant's struggle becomes more grim when we consider that his holding of state land was often forced upon him in the firstplace. It has been suggested that prodomatic leases involved subleasing of some form of state land.[1] This would suppose that katoikic and hieratic land were considered state land in the same category as edaphe or usiac land. But we have no sure evidence to call katoikic land "state" land rather than "land in grant." At this time in Tebtunis, katoikic and hieratic land holdings were all but private, since right of alienation seems to have existed. The title, however, rested with the state.[2] In these Tebtunis abstracts, only fifty percent of the prodomatic leases for which we have data are subleases. This is perhaps not a large enough number to make general statements about impoverished state tenants who bind themselves to a prodomatic lease in order to provide for their very existence. This is not to say, however, that this situation could not exist for some of the small farmers.

The speculators would control the second possible subleasing situation. These men could lease large tracts of land, public or

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1. Henig, Bodenpacht, p. 36.
2. The much-debated subject of land tenure deserves a new study, but falls outside the scope of this work.

private, and then sublease it, taking all the risks, in order to make a profit. Some of the state land parcels do seem to be rather large (about 14 arouras) to have been forced upon the peasants and it is more reasonable to see these larger areas as voluntarily leased. Speculation in various crops, the most important being grain, would not, however, require the use of a prodomatic lease unless the transaction was actually an act of money-lending. "Loan shark"/ speculators could have appeared in bad times to push the hard-pressed small holder into debt and further erode his economic stability.[1]

The evidence for the existence of pressing economic circumstances can be seen, first of all, in the rise in the percentage of prodomatic leases in the first quadrimester of A.D. 46-7 from 21 percent of the lease total in A.D. 45 to 40 percent in A.D. 46. This suggests that existence was becoming more difficult for the peasant, but since we do not know specifically which of the reasons prompted him to go into debt, we cannot say for sure.

If times were indeed hard, further evidence can be found to support this idea. The crop mentioned in many of these lease entries is chortos, fodder or pasturage, which included such things as clover, arakos and grasses. Grasses could be planted later than the grains, indicating perhaps that the farmers had to wait a longer time for the flood to recede. This would be necessary in the event

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1. P Yale 67, introduction, p. 212.

of a higher than normal flood. The late baring of the ground required a late crop of fodder plants with the resulting reduction in cereal production and a famine.[1]

It appears, then, that there was a high flood around the year A.D. 45-6 which caused more than normal hardship for the Tebtunites and other Egyptians. It remains to investigate the other contracts to see if this picture will hold.

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1. A.C. Johnson, "Papyri from Tebtunis, Part 1," AHR 40 (1935), p. 482.

TABLE 28

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 121 verso		PACHON			
I, 10	1[b]	5	....	....	nomos
I, 11	1	5	....	....	nomos
I, 15[c]	1	5	4	pyros	....
I, 20[c]	1	11	6	....	....
II, 2[c]	2	12	4-1/2	....	ousiake ge
II, 3[c](4)[d]	3[e]	16	5	....	katoikike ge
II, 4[c](5)[d]	3[e]	16	5	pyros krithos	....
II, 9[c]	3[e]	16	14	lotinon	demosia edaphe
II, 10[c]	3[e]	16	5	krithos	demosia edaphe
II, 11[c]	3[e]	16	2	....	....
II, 19[c]	1	18	....	....	thesauros
III, 2[c]	3[e]	24	4	lotinon	demosia edaphe
III, 4[c]	3[e]	25	5	lotinon chortos	katoikike ge ousiake ge
III, 5[c]	3[e]	25	4	lotinon	....
III, 9[c]	1	26	10-1/2	pyros arakos	hiera ge
III, 12[c]	3[e]	26	23	chortos	nomos
		PAYNI			
IV, 3	1	5	5	....	....
IV, 9	2	17	6	....	....
V, 2	1	25	....	....	edaphos
V, 4	1	26	11	....	....
V, 7	1	28	4	....	....
		EPEIPH			
V, 17	1	4	6-1/2	....	....
VI, 1	1	7	7	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 121 verso		EPEIPH			
VI, 8	1	9	1/2 share	....	nomos
VI, 9	1	9	2	....	....
VI, 11	1	11	4	....	....
VII, 5	1	19	3	....	hiera ge
VII, 8	1	19	6	....	....
VII, 11	1	22	7	....	....
VII, 12	1	24	....	....	balaneios
VII, 13	1	24	2-1/4	....	....
VIII, 2	1	30	....	....	edaphos
VIII, 8	1	30	....	....	edaphos
		KAISAREIOS			
IX, 1	1	5	10	....	kleros
IX, 2	1	5	3-1/2	....	....
IX, 3	1	5	8	....	kleros
IX, 9	1	12	12	....	....
IX, 12	1	14	3-1/3	....	....
IX, 13	1	14	4	....	....
IX, 14	1	14	10	....	kleros
IX, 15	1	14	4-1/2	....	hiera ge
X, 5	1	16	....	....	edaphos
X, 8	1	16	6	....	....
X, 9	1	16	....	....	nomos
X, 16	1	19	6	....	kleros
X, 18	1	19	4	chortos	....
XI, 2	1	23	....	....	oil press
XI, 6	1	24	4-1/2	....	....
XI, 7	1	25	9	....	kepourike ge

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 121 verso		EPAGOMENE			
XII, 2	1	3	....	....	....
XII, 16	1	5	24	....	....
P Mich. II 123 recto		SEBASTOS			
II, 21	1	16	....	....	nomos
II, 28	1	16	....	chloron	....
II, 31	1	18	6-1/2	....	....
II, 49	1	23	2	ampelos	....
III, 3	1	23	4	....	....
III, 4	1	23	13	....	....
III, 6	1	23	8-1/2	....	chlorophoros
III, 10	1	24	6-1/2	....	....
III, 12	1	24	6	chloron	....
III, 13	1	24	3	....	....
III, 17	1	25	5	chloron	....
III, 23	1	26	1	chloron	....
III, 24	1	26	4-1/2	chloron	....
III, 30	1	27	4	chloron	....
III, 34	1	28	....	....	....
III, 37	1	29	5	....	....
III, 38	1	29	3-3/4	....	....
III, 43	1	30	3-1/2	....	prosodike ge
		PHAOPHI			
III, 46	1	1	7	....	....
IV, 3	2	2	1/2	kalamia	....
IV, 4	1	2	2	chortos	....
IV, 6	3	2	1/2 share	....	pedion

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 123 recto		PHAOPHI			
IV, 8	1	2	....	....	kenos nomos
IV, 9	2	3	1/2 share	....	pedion
IV, 11	1	3	3	....	....
IV, 13	1	4	5	chloron arakos	
IV, 17	1	4	4	chortos	....
IV, 26	2	5	....	opsonion	kepourike ge[f]
IV, 29	2	5	5	chloron	....
IV, 32	1	8	8-1/2	....	....
IV, 35	1	9	3	chloron	....
IV, 36	1	9	2-1/2	chortos	....
IV, 37	1	9	2	chortos	....
IV, 38	1	9	2-1/2	chloron	....
IV, 40	1	10	12-1/2	chloron	....
IV, 41	1	10	....	....	....
V, 1	1	11	3	chloron	....
V, 3	1	13	2	....	ampelon
V, 4	2	14	....	....	nomos[g]
V, 5	1	14	4-1/2	chortos	....
V, 6	1	15	5	chortos	....
V, 7	1	15	4-1/2	chortos	....
V, 10	1	16	4	chloron	....
V, 11	1	16	....	....	paradeisos[h]
V, 14	3	16	1/2	....	phlos
V, 16	2	17	2-3/4	chloron	....
V, 29	1	21	7	chloron	....
V, 35	1	22	2	....	katoikike ge
V, 38	1	24	....	chortos	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 123 recto		PHAOPHI			
VI, 5	1	29	3	chortos	....
VI, 6	1	29	12	chortos	....
VI, 8	1	30	....	chloron	....
		NEOS SEBASTOS			
VI, 11	4	1	....	....	ampelon
VI, 12	1	1	7	....	....
VI, 24	2	6	4-3/4	....	....
VI, 27	1	8	....	....	kepourike ge
VI, 28	1	9	5	chloron	....
VI, 30	1	9	9-1/2	chloron	....
VI, 31	3	9	2	....	....
VI, 32	1	9	4	....	hiera ge
VI, 36	3	9	10	....	....
VI, 37	3	10	5	....	....
VI, 38	2	10	1	....	kepos (?)
VI, 40	1	11	4	....	....
VII, 3	1	16	3	....	....
VII, 4	1	16	12	....	....
VII, 5	1	16	9-1/2	....	....
VII, 9	1	17	as many	....	....
VII, 11	1	18	10	....	....
VII, 17	1	19	....	boon[i]	....
VII, 23	1	19	9	chortos	....
VII, 26	1	19	....	....	paradeisos
VII, 29	1	21	1-1/2	chloron	....
VII, 40	1	25	2-1/2	chortos	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 123 recto		CHOIAK			
VIII, 12	3	7	....	....	nomon
VIII, 14[j]	1	7	....	....	....
VIII, 39	2	26	2	chloron	....
		TYBI			
IX, 31	1	2	1	chortos	....
IX, 38	1	5	2-1/4	chloron	....
X, 20	1	17	9	chloron	....
X, 21	1	17	5	chortos	....
X, 25	1	19	21-1/4	chloron	....
X, 27	1	20	1	krithos	....
X, 28	1	20	1/2 share	....	phlos
X, 30	1	21	10-1/2	....	....
XI, 11	1	29	....	....	oil press[k]
		MECHEIR			
XI, 24	2	2	....	....	....
XI, 44	1	11	4	....	....
XII, 5	2	16	6	chortos	....
XII, 15	1	19	4	....	....
XII, 21	1	24	2	....	....
XII, 22	1	25	12	chloron	....
XII, 26	1	27	5	....	ampelon
XII, 31	1	30	....	ampelos	....
XII, 32	1	30	....	chloron	....
		PHAMENOTH			
XII, 38	1	2	4	chloron	....
XIII, 5	1	..	....	....	....
XIII, 13[l]	3	20	10	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 123 recto		PHAMENOTH			
XIII, 14[l]	3	20	10	....	....
XIII, 21	2	26	11-3/4	....	....
XIII, 22	2	26	2	....	....
XIII, 23	2	26	....	....	nomos[m]
XIII, 26	2	27	52-1/2[n]	....	....
XIII, 27	1	27	....	....	balaneios[o]
XIII, 29	1	29	4	....	....
		PHARMOUTHI			
XIII, 39	3	1	5	....	....
XIII, 43	1	5	6	....	....
XIV, 11	1	7	9	....	....
XIV, 29	1	16	13-3/4	....	....
		PACHON			
XV, 29	1	13	2	chloron	....
XV, 34	1	15	5-1/2	....	....
XV, 37	1	17	....	....	....
XV, 39	1	17	....	....	....
XV, 40	1	18	....	....	....
XV, 41	1	19	....	....	....
XVI, 9	1	28	6	....	....
		PAYNI			
XVI, 24	2	2	8	....	....
XVI, 34	1	7	4	....	....
XVI, 35	1	7	....	....	....
XVI, 36	1	7	....	....	psilos topos
XVII, 6	1	10	....	....	oikia[p]
XVII, 12	1	14	6	....	....
XVII, 14	1	14	3	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crops	Land Type
P Mich. II 123 recto		EPEIPH			
XVIII, 13	1	4	1	chortos	....
XVIII, 14	1[q]	4	4	....	....
XVIII, 17	1	6	....	....	....
XVIII, 22	1	8	....	....	....
XVIII, 27	1	11	4-1/2	....	....
XVIII, 30	1	11	3	....	....
XVIII, 31	1	11	10 (?)	....	....
XVIII, 33	3	13	1/2	....	ampelon
XVIII, 35	3	14	7	....	....
XIX, 4	1	22	....	....	....
XIX, 13	1	24	4	....	....
XIX, 14	1	24	6	Chloron	....
XIX, 24	4	28	....	....	nomos
XIX, 28	1	29	6	chortos	....
XIX, 30	1	29	5	chortos	....
		KAISAREIOS[r]			
XX, 4	1	2	....	....	....
XX, 6	1	2	....	....	....
XX, 7	1	2	....	....	....
XX, 8	1	2	....	....	....
XX, 22	1	5	....	....	....
XX, 25	1	5	....	....	....
XX, 26	1	5	4	chortos	....
XX, 29	1	5	....	....	....
XX, 31	1	6	7	....	....
XXI, 29	1	9 (?)	13-1/2	....	....
XXI, 34	1	2?	4	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. II 123 recto		KAISAREIOS			
XXI, 37	1	27	....	chortos	....
XXI, 38	1	27	3	....	....
XXI, 39	1	27	4	chortos	....
XXI, 48	1	23	10 (?)	....	....
XXII, 3	1	24	....	chortos	....
XXII, 4	1	24	4	....	....
XXII, 6	1	24	2	....	....
XXII, 7	1	24	7-1/2	....	....
XXII, 13	1	24	6	....	....
XXII, 14	1	24	6	....	....
XXII, 17	1	28	1-1/4	....	....
XXII, 21	3	28	3	....	....
XXII, 22	1	28	10	chortos	....
XXII, 23	1	28	1 (?)	chloron	....
XXII, 26	1	30	....	....	....
XXII, 28	1	30 (?)	6	....	....
XXII, 29	1	30 (?)	....	....	....
XXII, 36	1	30 (?)	....	....	ampelon
P Mich. V 238		SEBASTOS			
I, 5	1	5	7	....	....
I, 10	1	5	....	....	paradeisos
I, 11	3	5	....	....	....
I, 14	1	7	6	chortos	....
I, 15	1	7	1-1/2	chortos	....
I, 24	2	14	3-3/4	....	....
I, 26	2	14	8	chortos	....
I, 33	3	22	....	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crop	Land Type
P Mich. V 238		SEBASTOS			
I, 34	1	22	....	karponeia	....
I, 37	1	22	8	....	....
I, 38	3	22	1-3/4	....	....
I, 39	3	22	4	....	....
I, 40	3	22	4	....	....
I, 41	3	22	13	....	....
I, 45	1	25	8	....	....
I, 47	1	25	13	....	....
I, 49	1	25	1	....	....
II, 54	1	26	2	....	....
II, 55	1	26	3	....	....
II, 57	3	26	....	....	nomos
II, 67	1	28	7-3/4	....	....
II, 72	1	29	8	....	kleros
II, 75	1	30	....	karponeia	....
II, 76	2	30	....	....	kepourike ge
II, 79	3	30	10	....	....
II, 86	2	30	7	....	....
II, 89	1	30	3	chortos	....
II, 90	1	30	6	....	....
		PHAOPHI			
II, 95	2	2	6	chortos	....
II, 97	2	2	3-3/4	chortos	....
II, 99	1	3	2	....	....
II, 101	3	4	1	....	....
II, 103	1	4	....	....	....
III, 112	1	5	....	....	....
III, 115	3	7	6	....	....
III, 123	1	7	6	....	....

TABLE 28 - Continued

LEASES

Reference	Lease Type	Date	Amount of Land[a]	Crops	Land Type
P Mich. V 238		PHAOPHI			
III, 125	1	9	....	....	ampelon
III, 131	1	10	....	....	ampelon
III, 135	1	21	....	....	paradeisos
III, 140	1	26	....	....	ampelon
		NEOS SEBASTOS			
III, 147	1	2	1	....	....
IV, 166	1	12	1-1/2	....	....
IV, 175	1	17	6	....	kleros
IV, 176	1	17	9	....	kleros
		CHOIAK			
V, 220	3	9	2	....	....
V, 229	1	16	1	....	kleros
V, 230	2	16	2-1/2	....	kleros

[a]The land amounts are in arouras.

[b]The codes for the forms are: 1 - misthoseos, 2 - homologia misthoseos, 3 - homologia misthoseos prodomatikes, 4 - misthosis prodomatike.

[c]This entry has a corresponding abstract in the eiromenon.

[d]The numbering of these lines is 3 and 4 when it should be 4 and 5.

[e]This lease is a misthosis in the anagraphe, but a misthosis prodomatike in the abstract.

[f]The rent is 148 drachmas.

[g]This land is called limna ... kai nomos.

[h]The rent is 67 artabs barley and 60 drachmas.

[i]The object leased here seems to be oxen. The rent is 240 drachmas.

[j]This lease is akyrosime.

[k]The rent for this oil press is seven measures of olives.

TABLE 28 - Continued

LEASES

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[l]These two prodomatic leases have the same lessor but different lessees.

[m]The land amount is two divisions of nomos and the rent is 764 drachmas.

[n]This homology may not be a lease but it does mention the rent at harvest time, 210 drachmas.

[o]This lease is for 1/3 share of a bath building and the rent is 523 drachmas.

[p]The rent is 40 drachmas.

[q]This lease is akurosime.

[r]Includes intercalary days.

Service Contracts

Introduction

There are three types of contracts listed in the Tebtunis anagraphai which are directly related to service or labor: paramone, nursing, and apprentice contracts.[1] The paramone may be considered the main type of service agreement, while the other two are subcategories of this type and share some of its elements and differ in others.[2]

Paramone (παραμονή) involved the concept of contractual obligation of a person to remain and present himself to another person for service.[3] The paramone agreement was in other words:

> ...a contractual labor relationship of a semi-bondage type which could be arranged with his former master by a slave who had just been manumitted or by a free workman who entered into a labor agreement to be at the call of his employer for a fixed term of service.[4]

During the time of this relationship, the free worker gave up two of the four characteristics of the free man: free choice of work and part of his complete freedom of movement because he had to "remain" available for his employer's work. Legally, however, he was still free and was immune from unwarranted seizure.[5]

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1. Westermann, "Paramone," p. 24 distinguishes a fourth type, the homologia ergon, for which see below.
2. Adams, Paramone, p. 144 considers the apprentice contract to be a subcategory of the paramone.
3. Samuel, "Paramone Clauses," p. 299.
4. Westermann, Slave Systems, p. 55.
5. Ibid.

Nursing contracts (συγγραφὴ γαλακτοτροφίας or ὁμολογία τροφίμου) also involved a certain restraint on the full liberty of the worker. In these contracts, a woman agreed to raise a child for a specific amount of time, acting as its wet nurse. Bothe the child and the nurse could be either slave or free, but most often, in the documents where such details can be discerned, the nurse is free and the child is a slave. There were many regulations placed on the free nurse and her husband to protect the well-being of the child, and in return the couple received prepayment of either salary or a loan before the service began.[1]

Apprentice contracts (διδασκαλικαί) usually concerned the labor of a youth, slave or free, male or female, who was put into the service of a craft master by a parent, guardian, or owner for the purpose of either learning the craft or doing the labor. Two types of apprentice contracts have been distinguished: the Lehrvertraege and the Lehrlingsvertraege. The former involved teaching the skill or trade while the latter involved the exercise of the skill or the performance of work for the craft master.[2]

Compared with some of the other types of documents found in the Tebtunis registers, there are relatively few service contracts, especially apprentice agreements. There are, however, enough perhaps, to add more information on the town's economic situation in the mid-first century.

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1. Johnson, Roman Egypt, pp. 286-90 and Adams, Paramone, pp. 149-61.
2. Adams, Paramone, pp. 119-20.

TABLE 29

SERVICE-RELATED CONTRACTS

Month	Paramone Contracts		Nursing Contracts		Apprentice Contracts	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
Sebastos	3	3	1	2	2	0
Phaophi	1	1	1	3	0	0
Neos Sebastos	1	3	4	3	0	0
Choiak	1	2	0	1	0	0
Second Quadrimester	P Mich. 123		P Mich. 123		P Mich. 123	
Tybi	1		3		0	
Mecheir	1		0		1	
Phamenoth	4		0		0	
Pharmouthi	1		5		1	
Third Quadrimester	P Mich 123	P Mich. 121	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121
Pachon	0	1	0	1	0	1
Payni	0	2	2	0	0	0
Epeiph	1	4	1	1	0	0
Kaisareios	0	4	1	0	0	1
Intercalary Days		1		1		1
QUADRIMESTER TOTALS:	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
	14	9	18	9	4	0
		P Mich. 121		P Mich. 121		P Mich. 121
		12		3		3

Paramone Contracts

During the year A.D. 45-6, there were a total of fourteen paramone contracts entered in the registers of Tebtunis.[1] The second quadrimester, the months Tybi to Pharmouthi, were the busiest for this type of contract, since half of the year's total were entered in the anagraphai at this time. There were nine paramone contracts drawn up and entered during the first quadrimester of the following year, A.D. 46. During the previous year, six contracts were entered during the first four months. The final quadrimester of A.D. 42 exhibts the highest quantity of these contracts, eleven in all; the months Epeiph and Kaisareios are the highest in volume with four paramonai in each. The same period of months, four years later, has only one paramone entered in Epeiph.

The paramonai make up 2.1 percent of the total number of contracts entered for the year A.D. 45-6, but the percentage of paramonai per quadrimester is somewhat higher as shown in Table 30.

The paramone contracts, like the leases, could serve more than one purpose. They could involve a simple labor relationship as a lease could be a lease, or they could supply the antichresis of labor on a connected loan just as a prodomatic lease provided antichresis. It is difficult to decide exactly which type of paramone appears in the anagraphai entries. Are they all loans or are only a few of them loans? There have been many opinions on the nature of the paramone contract in general and the Tebtunis paramonai in particular, and a

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1. Table 29.

TABLE 30

PERCENTAGE OF PARAMONE CONTRACTS BY QUADRIMESTER

Quadrimester	Number of Paramonai	Total number of Contracts	Percentage
Sebastos to Choiak A.D. 45-6	6	230	2.6
Sebastos to Choiak A.D. 46-7	9	241	3.7
Tybi to Pharmouthi A.D. 45-6	7	190	3.7
Pachon to Kaisareios[a] A.D. 45-6	1	254	0.4
Pachon to Kaisareios[a] A.D. 42	11	247	4.5

[a]Includes intercalary days.

brief survey of some of these opinions may help to clarify the nature of the obligation that the worker took on and how it affected him socially and economically.

It has been said that the paramone contract was a general service contract in which the worker acted as a general handy-man for the employer and "remained" near the employer to do whatever work was needed during the term of the agreement.[1] The paramonai then could be differentiated from the more specific labor contracts like the homologia trophimou and the didaskalikai. If this view reflects the actual situation, the unskilled worker hired himself out to work at any job for a wage which was paid wholly or partly in advance. The

1. Westermann,"Paramone," p. 12.

wage for the whole term's employment would then be reflected in the amount of drachmas given in the anagraphe entry; for example: ὁμολο-(γία) Φάσιτο(ς) πρὸ(ς) Ἀρυῶ(την) παραμο(νῆς) (δραχμῶν) ρ .[1]

But in Tebtunis not all paramonai involved general labor which was unspecified in the contract. One abstract in the Michigan collection[2] preserves a paramone contract in which Patunis and his son, Aunes, agreed to have the son work in the pottery of Patron as a clay kneader and "do all the things assigned to him."[3] The exact nature of his labor is described in part in this document; Aunes was to do the specified job of kneading (wedging) clay and other general tasks. He was probably an unskilled laborer since clay wedging requires only strong arms or legs.[4] The evidence of this abstract somewhat weakens the idea that all paramonai were general service contracts.[5]

All of the Tebtunis service contracts may be also loans. It has been pointed out[6] that, in the case of the abstract just mentioned, the sum of 40 drachmas, received in advance by the father and son, was a loan and that the son was to work off the interest to this loan by

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1. P Mich. II 121 verso II, 17.
2. P Mich. V 241, lines 24-38.
3. P Mich. V 241, lines 33-34 translated as "...do all things assigned to him..." by A.E.R. Boak in P Mich. V, p. 89.
4. P Mich. V p. 87, note 33. The editor takes the participle (πηλοπατῶν), that is, (πηλοπατοῦντα) to mean that the clay was kneaded by treading it with the feet. If the initial mixing of the clay ingredients were meant then the job would require at least semi-skilled labor since raw clay mixing is difficult.
5. P Mich. V 355 may also be a paramone contract in which the paramonarios is a weaver. See below.
6. Samuel, "Paramone Clauses," p. 305.

his services in the pottery while receiving a monthly pay of first 11, and then 10 drachmas per month.[1]

Another opinion, however, holds that the paramone agreement found in P Mich. V 241 is an example of one of the three types of such contracts in which there is an advance payment.[2] In this case, then, the payment of 40 drachmas is really an advance payment of wages and not a loan at all. There are two pieces of evidence which argue against this particular document's being a loan. The first is the fact that there is no definite mention about paying back the 40 drachmas and the second that the employer does not supply upkeep and clothing which would normally form part of the loan, if this were one. This document, therefore, belongs in the group of paramone contracts in which there is "a true advance payment to bind the agreement." Such an advance payment was called an arrha, an incentive for the young worker to work.[3]

A survey of the paramone entries in the anagraphai shows that most of these entries specify the amount of drachmas exchanged in the transaction.[4] Many times, these amounts are said to be "silver," (ἀργύριον). It is possible, then, that these anagraphai entries

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1. The son was to receive 22 drachmas for the months Sebastos and Phaophi; lines 28-9.
2. Adams, Paramone, p. 67. The three categories of paramone payments are: 1) wages that may or may not be paid in advance. 2) payments of argyrion that had to be repaid. 3) advance payments called daneia or chreseis, loans.
3. Ibid. Here Adams is following A.E.R. Boak's introduction to P Mich. V 241 p. 84.
4. Table 31.

represent paramone contracts of the second category in which the form of payment is spoken of only as argyrion, but is otherwise not clearly defined. The argyrion had to be paid back after the work relationship was finished.[1] The question is whether the argyrion payment was a loan or not. An examination of the only abstract which corresponds to an anagraphe entry, P Mich. II 121 recto, III, 3, may clarify the status of the argyrion payment.

That P Mich. II 121 recto, III, 3 is a homologia paramones can be seen more from the anagraphe entry: ὁμολο(γία) Φάσιτο(ς) πρὸ(ς) Ἀρυώ(την) παραμο(νῆς) (δραχμῶν)ρ[2] than from the abstract, which is a unilateral acknowledgement from Phasis, son of Peteno( ), to Haryotes, son of Lysimachos. First, Haryotes was to pay Phasis the sum of 100 drachmas (ἀργ(υρίου) (δραχμῶν) ρ) and then a monthly allowance of 1-1/2 artabs of something unnamed, and an annual allotment of fleeces, or shearings, of four sheep. There was no interest on the 100 drachmas, and in addition to all the other concessions to Phasis, Haryotes was to pay Phasis' poll tax as well. In return, Phasis, according to the anagraphe entry, bound himself to work for Haryotes at some unspecified work, possibly as a weaver or shepherd.[3]

This contract has some of the markings of a loan. The 1-1/2 artabs probably constituted the monthly food allowance; the fleeces might serve for the clothing allowance, especially if the worker

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1. Adams, Paramone, p. 64.
2. P Mich. II 121 recto II, 17.
3. P Mich. II p. 47.

were a weaver, and Haryotes paid the poll tax. If a loan is to be identified by these additional payments, then this paramone contract is also a loan. It is a loan with a difference, however, because there is no interest. The lack of interest is specifically mentioned in the acknowledgement in the phrase (ἀντὶ τῶν τόκ(ων)).[1] The capital was to be repaid at the end of the work-period but in the meantime, Phasis, the worker, had the use of the money. Use of work was exchanged for use of money,[2] and the argyrion was therefore most likely a loan.

The other abstract for a homologia paramones, P Mich. II 121 recto IV, 8 is similar to III, 3. Hermias, son of Cheos, borrowed 100 silver drachmas from Soterichos, son of Kronides. In place of paying interest on this loan, Hermias promised to work daily for Soterichos for one year at "all the aforesaid tasks" (πάντα τὰ προγεγρ(αμμένα)[3] and to pay back the 100 drachmas at the end of the work period. The main difference in phraseology between this abstract and the previous one is the line "(he has) received from him in cash from hand to hand out of the house ..." (ἔχ(ειν) παρ' αὐτο(ῦ) παραχρῆ(μα) διὰ χ(ειρὸς) ἐξ οἴκ(ου)).[4] Another difference

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1. P Mich. II 121 recto III, 3, line 1.
2. Adams, Paramone, pp. 68-9. P Tebt. II 384 from A.D. 16 is a comparable document. Two brothers gave a third brother as an assistant to a weaver in exchange for a sum of 16 drachmas, food, clothing and salary. There was to be no interest on the argyrion. See also Westermann,"Paramone," pp. 17-18. Westermann cites lack of date of repayment as a criterion for an argyrion-paramone but III, 3 is incomplete and there is no sure way of telling whether or not there was a date of repayment.
3. P Mich. II 121 recto IV, 8.
4. Ibid.

TABLE 31

PARAMONE AND RECEIPT ENTRIES

Reference	Date	Amount of Money[a]	Other
P Mich. II 121 verso			
II, 17	Pachon 18	100	....
IV, 14	Payni 17	60	....
IV, 15	Payni 17	60	Receipt for IV, 14.
IV, 8 recto	Payni 28	100[b]	Omitted from verso.
V, 13	Epeiph 2	40	....
V, 21	Epeiph 7	60	....
VI, 3	Epeiph 9	...	....
VII, 21	Epeiph 29	100	....
IX, 7	Kaisareios 9	80	Same party of 1st part.
IX, 8	Kaisareios 11	84	Sokonopis for ll. 7,8.
IX, 18	Kaisareios 14	80	....
XI, 3	Kaisareios 23	100	....
XII, 15	Epagomene 5	60	....
P Mich. II 123 recto			
II, 5	Sebastos 8	24	....
III, 2	Sebastos 23	400	....
III, 18	Sebastos 25	40	....
VI, 7	Phaophi 30	...	Concerned with oil pressing.
VI, 14	Neos Sebastos 11	24[b]	....
VIII, 3	Choiak 2	60	....
X, 32	Tybi 21	100[b]	....
XI, 25	Mecheir 2	100[b]	....
XI, 26	Mecheir 2	100[b]	Receipt kata paramonen for XI, 25.
XII, 37	Phamenoth 2	100	....

TABLE 31 - Continued

PARAMONE AND RECEIPT ENTRIES

Reference	Date	Amount of Money[a]	Other
XII, 41	Phamenoth 2	40	....
XII, 47	Phamenoth 4 (?)	40[b]	....
XIII, 12	Phamenoth 20	40[b]	....
XIV, 7	Pharmouthi 5	...	....
XIX, 17	Epeiph 26	60[b]	....
XXII, 11	Kaisareios 24	...	Receipt.
P Mich. V 238 recto			
I, 21	Sebastos 12	48[b]	....
II, 56	Sebastos 26	60	....
II, 69	Sebastos 28	20	....
II, 104	Phaophi 5	24[b]	....
IV, 167	Neos Sebastos 12	60[b]	Receipt for line 168.
IV, 168	Neos Sebastos 12	60[b]	Paramones ergon.
IV, 207	Neos Sebastos 30	24[b]	....
IV, 208	Neos Sebastos 30	...	....
IV, 212	Choiak 4	500[b]	....
IV, 213	Choiak 4	100[b]	....

[a]In drachmas.

[b]Silver drachmas.

between the two is the inclusion of the date of repayment, presumably at the end of the year of service which began in Sebastos of the third year of Claudius. But despite the difference, IV, 8 is also a paramone contract of the "argyrion type."

The argyrion had to be repaid at the end of the service period, but what happened to the debtor who could not pay back his capital at the proper time? Possibly we see such a situation reflected in two entries of P Mich. II 123, XI, 25-6. On Mecheir 2, Pnesis and his wife had a paramone contract drawn up and entered in the anagraphe. The agreement was made with Galates for the sum of 100 silver drachmas; ὁμο(λογία) Πνέσιος καὶ τῆς γυ(ναικὸς) πρὸς Γαλάτη[ν] παραμο-(νῆς) ἀργ(υρίου)(δραχμῶν) ρ . On the same day, Orseus acknowledged the receipt of 100 silver drachmas from Pnesis and his wife "according to a contract of paramone": ὁμο(λογία) Ὀρσῆτος πρὸς Πνέσιν καὶ τὴν [γυ(ναῖκα)] ἀποχῆς κατὰ παραμο(νήν)(δραχμῶν) ρ.

Pnesis and wife are probably the same people in both entries. It looks as if they worked for a time, a year perhaps, for Orseus under a paramone contract and then had been unable to repay the 100 drachmas which they had been advanced or loaned. Therefore, they had had to bind themselves to another paramone contract with Galates in order to pay Orseus with the advance received from Galates on the same day. Orseus then acknowledged receipt of the money according to the previous agreement.[1] Pnesis and his wife did not really renew

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1. Westermann, "Paramone," pp. 19-21.

their paramone contract with Orseus[1] since their labor relationship with him was completed with his receipt of 100 drachmas from them. They merely exchanged "employers." Possibly, they could have continued to work for Orseus under a new contract but then the capital would not have necessarily been worked off by their renewed labors.

A paramone could involve an advance payment of wages, either wholly or partly as in P Mich. V 241; it could involve an advance payment referred to as to argyrion, "the money," or specifically "x silver drachmas" as in P Mich. II 121 recto, III, 3 and IV, 8. It could also involve an advance payment called daneion (δάνειον) or chresis (χρῆσις), "loan." Examples of the first two categories are found in the Michigan Tebtunis collection, but not the daneion-type. There is no mention of "loan" in these documents, although two of the advance payments were indeed loans. The question is how many of the paramone entries in the anagraphai were loans and how many were not? In a work on the paramonai a few years ago, the suggestion was made that all the entries in these registers are loans.[2]

The argument that each paramone contract is a loan is based on the assumption that the three extant abstracts, considered to be loans, represent the contents of all service contracts entered in the

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1. Westermann suggests that inability to repay the argyrion could result in a sort of semi-bondage for the workers. This situation would look like serfdom if the same "employer" were repeatedly involved. In this case, there is a different "employer," outwardly it is not semi-bondage, but to the hard-pressed couple it might feel like it.
2. Samuel, "Paramone Clauses," pp. 302-306, especially 305, note 14.

anagraphai.[1] Additional support for this argument is sought in the analogy which can be made between the residence agreements and the paramone agreements. The residence agreements, entered in the anagraphai as homologiai enoikeseos, are loans, drawn up in the form of a homology, with right of inhabitation, or provision of residence as a substitute for the interest. Since the entries for the paramonai are the same in form, the homologia paramones must also be a loan with service as the substitute for interest. In the Tebtunis registers both types of contracts are consistently entered as homologies with the genitive of the noun to describe the character of the homology. Finally, the receipts for these contracts prove that they were connected with the repayment of the capital sum.[2]

First of all, it would be a mistake to take all three abstracts as loans when there are only two, that is P Mich. II 121 III, 3 and also IV, 8. P Mich. V 241 is not a loan but a contract of employment or service with an advance payment of salary. The parties of the first part, Patunis and Aunes, were to pay the poll tax and provide the clothing and board. Usually, in loans of this sort the creditor pays for these things. Furthermore, it is not positive that they have to pay back the 40 drachma advance which is equal to four months pay.[3] If, as it appears, that this contract was not a loan, then there could be at least two different kinds of paramone contracts

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1. Ibid., Samuel does qualify this idea by stating that the term "paramones" is not "generally limited to loans with obligation in the legal terminology of the period, but it does seem to be limited in the examples we have of the abstracts."
2. Samuel, "Paramone Clauses," pp. 302-306, especially 305, note 14.
3. Adams, Paramone, p. 67 and 84.

among the entries in the registers: loans and non-loans. It is notable that two types of paramone entries exist in the three registers. Let us consider whether these entries could describe, in their laconic fashion, the nature of the paramone contracts to which they correspond.

Some of the paramone entries appear thus: ὁμο(λογία) Πετε-σούχο(υ) πρὸς Πτολεμὲν παραμο(νῆς) ἀργ(υρίου) (δραχμῶν) ρ .[1] The significant point here is the word "argyrion." Among the thirty-eight paramone entries (including receipts), twelve of them have the money described as "silver." Most of the paramone entries however, do not have the word "silver" as in the following entry: ὁμο(λογία) Ἡρακλείδο(υ) πρὸς Στοτοῆτιν παραμο(νῆς) (δραχμῶν) κδ .[2] Twenty-two of the entries appear without the "silver" designation.[3] One possibility is that the argyrion-type paramone contracts, which are considered to be loans, are differentiated from the work contracts by this additional word. In that case, we would have almost twice as many work contracts as loans.

This cannot be the case however, since Egyptian money under the Julio-Claudians was generally called "silver"[4] and furthermore, the scribe of the anagraphai is not accurate or reliable. We can see this from his many mistakes. For example, P Mich. II 121 recto,III 3 corresponds to verso II, 17. In the abstract, however, the money is described as "argyrion," while in the anagraphe it is not. The sum

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1. P Mich. II 123 recto, X 32.
2. P Mich. II 123 recto, II, 5.
3. Please see Table 31.
4. Johnson, Roman Egypt, pp. 424-438.

of money involved is omitted entirely in a few of the entries[1] and in P Mich. V 238, lines 167-8 the entries would be completely confused were it not for P Mich. II 124, which duplicates this register in part.

The first entry in P Mich. V 238,(line 167) reads: ὁμο(λογία) Ταρμουθίο(υ) πρὸς Θαῆσιν ἀποχῆς παραμο(νῆς) and the second (line 168) has: ὁμο(λογία) Θαήσιος πρὸ(ς) Ταρμουθίο(ν) παραμο(νῆς) ἐργῶ(ν) . A clearer picture of the transaction described by these two entries can be found in P Mich. II 124 recto, I, lines 14 and 15. Line 14 has: ὁμο(λογία) Ταρμουθίο(ς) πρὸς Θαῆσιν ἀποχῆ(ς)[ἀργ(ύριου)](δραχμῶν) ξ and line 15: ὁμο-(λογία) Θαήσιος πρὸ(ς) Ταρμοῦθιν παραμο(νῆς)[ἀργ(υρίου) (δρ.)]ξ From these we learn that the sum involved was 60 drachmas which Tarmouthis borrowed from Thaesis; Tarmouthis seems to have contracted to work for Thaesis in place of the interest.[2]

The anagraphe entries, then, can tell us nothing certain about the nature of the original contract. The next possibility for identification of these paramone contracts is found in the analogy between the homologia enoikeseos and the homologia paramones. The homologia enoikeseos is supposed to be a single contract in which a loan is given and received and provision of residence is supplied in lieu of interest. The main point here is use of the single contract to

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1. See Table 31.
2. Westermann, "Paramone," p. 24 takes this line as evidence for the existence of a type of service contract other than the paramone, nursing or apprentice contracts. Paramone ergon is the fourth. Since this line is obviously corrupt, we should probably discount it entirely.

express the twofold relationship of loaning and substituting.[1] The same sort of arrangement is found in the service contract, loaning and substituting service for interest. None of the paramone contracts are coupled to a separate loan as the nursing contracts are, for example. The homologia enoikeseos, however, often does appear in the anagraphai attached to a separate loan in a separate entry.[2] A separate loan is connected to only 17 percent of the residence contracts and therefore the analogy between the service and the residence homologies is weakened.

If there is no certainty to be found in the comparison of paramone and enoikesis contracts then the receipts must be the final possibility. There are four receipts connected with a contract of service.[3] They should show that the capital was returned to the creditor at the end of the service period. With two of the three receipts this is a possibility. The first[4] is a receipt for 100 drachmas "according to a paramone." The second[5] is a receipt for an unknown amount "according to a paramone (κατὰ παραμονήν)." The final examples[6] are different from the other two since they record the receipt of the advance payment by the debtor at the same time as the paramone contract was entered upon. What the existence of these

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1. Samuel, "Paramone Clauses," pp. 304-5.
2. Table 52.
3. Table 31.
4. P Mich. II 123 XI, 26.
5. P Mich. II 123 XXII, 11.
6. P Mich. V 238 IV, 167 and 121, IV, 15. Lines 168 and 14 respectively preserve the record of the paramone contract between the same two persons as the receipts.

receipts "according to a contract of paramone" shows is that it is possible for at least some or possibly even all of the paramone agreements to have been loans, the capital of which was returned.

There are several receipts which record receipt of either misthos or opsonion, wages,[1] but the type of contract that prompted these payments is not mentioned. Probably, many paramone receipts are hidden among the homologies which are undistinguished according to contract type. Many of the entries for these bare homologies mention amounts of money, land, and produce and any could be receipts, some for repayment according to a contract of service. But we can only speculate on this.

Some of the service contracts were loans or connected to loans and some were not. A specific kind of service relationship which was always tied to a loan in the Tebtunis registers was the nursing agreement.

The Nursing Contracts

The nursing contracts also involved service, but of such a particular nature that the Tebtunites always differentiated them from the contracts of paramone by calling them homologiai trophimou (ὁμολογία τροφίμου). Unlike the paramone contracts, all of these homologiai trophimou are certainly antichretic since every entry for them is followed soon after by an entry for a loan between the

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1. P Mich. II 121 IV, 10, 20; 123, III, 20; IV, 16; XV, 33.

same persons.[1] The service of nursing a child in Tebtunis at this time was always performed in lieu of interest on a loan.

There are thirty nursing contracts in the extant anagraphai; three are registered in the final quadrimester of A.D.42; eighteen for the three quadrimesters of A.D. 45-6; and nine for the first quadrimester of A.D. 46-7.[2] Since the volume for nursing contracts is generally low, even the busiest months have few of these contracts: Neos Sebastos and Pharmouthi of A.D. 45-6 have four and five respectively and Phaophi and Neos Sebastos of A.D. 46-7 have three examples each.

There are similarities in the distribution of both these contract types. Of the five extant quadrimesters, the three earlier ones have as many, or more nursing contracts than paramone contracts. In the first quadrimester of A.D. 46-7, there are exactly nine nursing contracts and nine paramone contracts. In the same period in the previous year there were six nursing and six service contracts. In the final quadrimester of A.D. 42 there were only three homologiai trophimou, while in the same quadrimester, there were twelve homologiai paramones. At the end of A.D. 45-6, there was only one contract of paramone to four nursing agreements.

In addition to the contracts themselves, there are also twelve receipts in the form of a homologia apoches tropheion (ὁμολογία ἀποχῆς τροφεῖων) in the following distribution: one in Epeiph, A.D. 42;

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1. Occasionally, the scribe interpolated another entry between the homologia trophimou and the loan as in P Mich. II 123 recto XIII, 33 and 35, but they belong together as is shown by the grammatikon's being labeled "for both."

2. See Table 29.

one in Sebastos, A.D. 45-6; two each in Phaophi and Neos Sebastos of the same year; one each in Mecheir and Pharmouthi and two in Payni. In the next year, A.D. 46-7, there is one nursing receipt entered in Sebastos and one in Neos Sebastos.[1] The receipts seldom mention anything other than the names of the parties involved; only twice is an amount of money specified.[2]

The nursing contracts, minus the receipts, make up 2.7 percent of the total number of contracts in the year A.D. 45-6. The percentage for the paramone contracts is 2.1. Table 32 gives the percentage of homologiai trophimou per quadrimester.

TABLE 32

PERCENTAGE OF NURSING CONTRACTS BY QUADRIMESTER

Quadrimester	Number of Entries	Total Number of Contracts	Percentage
Sebastos to Choiak (A.D. 45-6)	6	230	2.6
Sebastos to Choiak (A.D. 46-7)	9	241	3.7
Tybi to Pharmouthi (A.D. 45-6)	8	190	4.2
Pachon to Kaisareios[a] (A.D. 45-6)	4	254	1.6
Pachon to Kaisareios[a] (A.D. 42)	3	247	1.2

[a]Includes intercalary days.

In the case of the nursing contracts, we must rely upon the anagraphe entries and contracts from other regions in order to suggest the economic impact upon the participants, since there is only

1. Ibid.
2. P Mich. II 123 recto, VI, 13, 20.

one damaged nursing contract in the eiromenon of P Mich. II 121 and none in the Michigan collection which could be used to learn the details of such a relationship. There are, however, many nursing contracts in the papyrological corpus from which certain generalities may be drawn and, in addition, the anagraphe entries are for once somewhat more informative on sociological matters than for some of the other types of contracts.

Most of the entries for the nursing contracts show that the nurses in Tebtunis were free married women whose husbands acted as their guarantors. In four out of the thirty contracts and in one of the twelve receipts, there is either only one name for the party of the second part or a lacuna. In all other cases the nursing contract entries give the woman's name and add καὶ τὸν ἄνδρα . Once, the woman's name is followed by the phrase καὶ τὸν ἀδελφόν .[1] It is possible that he was her husband since brother-sister marriage was accepted, but in that case, he would probably have been called "husband." This nurse may have been unmarried and her brother, as her kyrios, was acting as her surety.

The picture of free married couples taking up the burden of raising a child for a wage fits the picture which is seen in the general group of nursing contracts. Slaves were also used as wet nurses, but then the nurse was only an object in the contract which was made between her owner and the party of the first part.[2] Possibly some of the entries that have only one name for the party of the

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1. P Mich. II 123 recto, XIV, 31.
2. Adams, Paramone, p. 154.

second part involve a slave whose owner hired her out.[1]

Most of the nursing contracts are homologiai trophimou doulikou or doules (ὁμολογία τροφίμου δουλικοῦ – δουλῆς). Only two entries appear as homologiai trophimou.[2] One names the child[3] without specifying his status. In some entries that includes the designation of slave, the child's name is also given.[4]

The infant could be either a free child or home-born slave, but more often the baby was a foundling, said to be ἀπὸ κοπρίας. Exposure of children by indigent parents who could not afford them was common in Egypt, particularly during hard times. Sometimes, the exposed child was picked up to be reared as the slave of the man who saved him. Then he would be put out to a wet nurse. The nurse and her husband probably would have had to expose their own infant in order to be free to care for another child for a wage and could only hope that their own would be picked up to be reared as a slave in the same way.[5]

Both husband and wife had a part in the fulfillment of the contract with the husband acting as "father" to the nursling and

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1. P Mich. II 121 verso I, 18; 123, recto, XXII, 19; M, 238, IV, 216 are examples of the nursing contracts which have one name for the party of the second part. See Table 33.
2. P Mich. II 123 recto, IV, 18; XIII, 38. Some other entries have both the nursing contract and loan entries compressed into one entry. These appear as a ὁμολογία τροφίμου καὶ δανείου and do not mention the slave.
3. P Mich. II 123 III, 32.
4. P Mich. II 123 VII, 46; X, 9.
5. Adams, Paramone, p. 154. Possibly, the couple could give their child to a relative to raise, as is done by modern wet nurses, but this could have necessitated a payment to the relative, as it does in modern times.

guarantor for his wife. Since the care of the child took place in the home of the nurse and therefore out of the employer's daily oversight, the nurse had to agree to various regulations which aimed at preserving the health of both the child and herself. For one thing, she was not to become pregnant or nurse another child at the same time. Periodically, she and the child had to go to the home of the employer to be examined. This gave the employer more control over her; although she was legally free, her freedom of action was curtailed.

Given the sanitary conditions which must have existed in Egypt in the first century A.D., raising an infant must have been difficult. If the child died through no fault of the nurse, the contract usually stipulated that the employer would substitute another for the nurse to raise in its place. She had to fulfill her contract. The employer, on the other hand, could not take the baby back before the end of the contract under threat of stiff penalties, so the nurse was protected too.[1]

As with the paramone contracts, payment was made in advance. In Tebtunis, all the advance payments for nursing duties were called loans (δάνεια) and the entries for these loans show that the husband, acting in his role as guarantor, made this agreement with the employer. Most of the nursing contracts are entered in the name of the wife, adding "and her husband." Most of the loans are entered with the name of the husband, adding "and his wife."

The loan was considered to be a separate contract, at least by the scribe who entered the nursing contract/loan pair in the

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1. Adams, Paramone, p. 154.

anagraphai. This is shown by the fact that the loan is usually entered on the line following the homologia trophimou and the date is often different too. Of the thirty entries, twenty-four have the loan entered in this way on successive lines. And sixteen of these twenty-four have the loan listed as having been entered on the succeeding day.[1] Six entries are made in the more compressed form: ὁμολογία τροφίμου καὶ δανείου .[2] But even in this shortened version, the loan is distinguished from the homologia trophimou by the kai. In fact, one of the six shortened entries has the kai daneiou on the following line and under the succeeding date.[3] This indicates that the scribe was so accustomed to separating the loan from the nursing entry, that he did so when there was no necessity for it. In this case, the scribe may have made the separation because the loan was made on Neos Sebastos 16, while the nursing agreement was made the day before. The nature of the two parts of the transaction makes the separation into two different contracts reasonable. The nursing agreement would have contained all the provisions for care of the child while the loan would have dealt with the money matters.

The daneion-entry is the one that notes the sum of money which has been advanced to the nurse and her spouse either as salary or loan.[4] There are twenty-four such entries in the anagraphai. In the

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1. The sixteen document pairs are: P Mich. II 121 verso, VI, 21, 22; XII, 8, 9; P Mich. II 123 recto, III, 32, 33; IV, 18, 19; VII, 7, 8; VII, 46, 47; XIII, 40, 41; XIV, 31, 32; XV, 7, 8; XVI, 28, 29; XVIII, 25, 26; P Mich. V 238 III, 113, 114; IV, 191, 192. See Table 33.
2. The six are: P Mich. II 123 recto, VI, 22, 23; XIII, 38; XVII, 32; XXII, 19.
3. P Mich. II 123 recto, VII, 7, 8.
4. See Table 33.

TABLE 33

NURSING CONTRACTS AND LOANS

Reference	Form of Entry[a]	Date	Amount in Silver Drachmas	Contracting Parties[b]
P Mich. II 121 Verso				
I, 18	1	Pachon 5	...	One Name
I, 19	2	Pachon 9	136	One Name
VI, 21	1	Epeiph 13	...	Wife
VI, 22	2	Epeiph 14	120	Husband
XII, 8	1	Epagomene 4	...	Wife
XII, 9	2	Epagomene 5	132	Husband
P Mich. II 123 Recto				
III, 32	3	Sebastos 27	...	Wife
III, 33	2	Sebastos 28	80	Husband
IV, 18	4	Phaophi 4	...	Wife
IV, 19	2	Phaophi 5	100	Husband
VI, 22	5	Neos Sebastos 6	...	Wife
VI, 23	5	Neos Sebastos 6	...	Both
VII, 7	5	Neos Sebastos 16	...	Both
VII, 8	5[c]	Neos Sebastos 17	110	Both
VII, 46	3	Neos Sebastos 28	...	Wife
VII, 47	2	Neos Sebastos 29	120	Lacuna
X, 3	1	Tybi 7	...	Lacuna
X, 4	2	Tybi 7 (?)	120	Husband
X, 9	3	Tybi 10	...	Wife
X, 10	2	Tybi 10	124	Husband
X, 23	1	Tybi 17	...	Wife
X, 24	2	Tybi 19	100	Husband
XIII, 33	1	Pharmouthi 1	...	Wife
XIII, 35	2	Pharmouthi 1	120	Husband
XIII, 38	5	Pharmouthi 1	120	Wife
XIII, 40	1	Pharmouthi 4	...	Wife
XIII, 41	2	Pharmouthi 5	120	Both

TABLE 33 - Continued

NURSING CONTRACTS AND LOANS

Reference	Form of Entry[a]	Date	Amount in Silver Drachmas	Contracting Parties[b]
P Mich. II 123 Recto				
XIV, 31	3	Pharmouthi 16	...	Both[d]
XIV, 32	2	Pharmouthi 17	120	Brother
XV, 7	1	Pharmouthi 29	...	Wife
XV, 8	2	Pharmouthi 30	...	Husband
XVI, 28	1	Payni 3	...	Wife
XVI, 29	2	Payni 4	140	Husband
XVII, 32	5	Payni 18	...	Wife
XVIII, 25	1	Epeiph 8	...	Wife
XVIII, 26	2	Epeiph 9	...	Husband
XXII, 19	5	Kaisareios 28	...	One Name
P Mich. V 238 Recto				
I, 27	1	Sebastos 14	...	Wife
I, 28	2	Sebastos 16	100	Husband
I, 62	1	Sebastos 26	...	Wife
I, 63	2	Sebastos 28	100	Husband
III, 110	1	Phaophi 5	...	Wife
III, 111	2	Phaophi 5	500	Both[e]
III, 113	1	Phaophi 5	...	Wife
III, 114	2	Phaophi 6	64 (?)	Both[e]
III, 136	1	Phaophi 22	...	Wife
III, 137	2	Phaophi 25	100	Both[e]
III, 152	1	Neos Sebastos 5	...	Wife
III, 153	2	Neos Sebastos 5	100	Husband
IV, 164	1	Neos Sebastos 9	...	Wife
IV, 165	2	Neos Sebastos 12	100	Husband
IV, 191	1	Neos Sebastos 24	...	Wife
IV, 192	2	Neos Sebastos 25	100	Husband

TABLE 33 - Continued

NURSING CONTRACTS AND LOANS

Reference	Form of Entry[a]	Date	Amount in Silver Drachmas	Contracting Parties[b]
P Mich. V 238 Recto				
IV, 216	1	Choiak 5	...	One Name
IV, 217	2	Choiak 9	80	One Name

[a]The contract forms found in the entries are coded: 1) homologia trophimou doulikou 1) daneion 3) homologia trophimou doulikou with slave's name 4) homologia trophes 5) homologia trophimou kai daneiou.

[b]'Wife or 'husband' - main (named) party to contract. 'Both' - both husband and wife are named. 'One name' - appears occasionally as main party to both contracts.

[c]This entry, in the form homologia trophimou kai daneiou, was written in two lines instead of one.

[d]Both refers to brother and sister.

[e]Neither partner is named; the entry says tous autous.

three contracts from the first quadrimester of A.D. 42, the amounts range from 120 drachmas to 136 drachmas. In the year A.D. 45-6, the "loan" amounts range from 80 drachmas to 140 drachmas. The average amount advanced for the nursing service was 114.5 in this year; the modal amount, which expresses the sum that appears most often, is 120 drachmas. In the first quadrimester of A.D. 46-7, the average amount was 138 drachmas and the median amount 100 drachmas. During these four months, the highest amount paid for nursing a slave was 500 drachmas.[1] Because the normal cost of nursing a child for two years was between 60 to 140 drachmas per year,[2] this larger sum may represent payment covering a longer period of time.

The wet nurse, then, like the paramonarios, expected some payment in advance. But the general rule extracted from a survey of all the homologiai trophimou seems to be that only partial payment, covering from three months at a time and longer, was made.[3] It would have been exceptional for the nurse to have received the whole payment at the beginning of the contract, yet the 500 drachma payment in A.D. 46 is so large that, excepting scribal error, it must be considered as either pay for more than three months or perhaps the entire wage/loan in advance.

However, the very fact that all the Tebtunis advance payments are called "loans," suggests that the general rules do not apply. The loan would be made at the beginning of the service period and

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1. P Mich. V 238 III, 3.
2. Johnson, Roman Egypt, p. 286.
3. Adams, Paramone, p. 159.

any payment thereafter could have been the allowance for expenses which appears in many nursing documents. In addition to advance payment, whatever form it took, the couple was often given two cotylae of oil per month as well as clothing and other things necessary for the care of the infant. When the child was returned to his master at the end of the nursing period, the clothing and other implements were returned too.[1] If the daneion were truly a loan, then at this time, the money advanced should have been returned as well. However, there is little evidence that it was, since all but two of the nursing receipts do not mention a specific sum.

The two receipts are entered on the first of Neos Sebastos, A.D. 46-7,[2] when a certain Komon acknowledged the "receipt of nursing--60 drachmas" from two different couples who had each nursed a slave child for him. Komon, in this case, was not only acknowledging that he had received the child and completed service but also all or part of the money.[3]

The only extant abstracts for a homologia trophimou and its related daneion would clarify some of these questions if the abstracts were complete.[4] In the agreement between Patunis and Herois the only sure information we can read between the lacunae is that Herois was to nurse a child named Thermoutharion for a period of two years. The remuneration she was to receive is lost and the restrictions placed

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1. Adams, Paramone, p. 155.
2. P Mich. V 238 VI, 13, 20. See Table 34.
3. Adams, Paramone, p. 160; but it is not clear exactly of what the tropheion in the apoches tropheion usually consisted.
4. P Mich. II 121 recto, I, 8, 9.

TABLE 34

RECEIPTS OF NURSING[a]

Reference	Date	Amount in Drachmas	Contracting Parties[b]
P Mich. II 121			
VII, 7	Epeiph 19	...	One name
P Mich. II 123			
II, 7	Sebastos 9	...	Wife
IV, 24	Phaophi 5	...	Wife
IV, 28	Phaophi 5	...	Both
VI, 13	Neos Sebastos 1	60	Wife
VI, 20	Neos Sebastos 1	60	Both
XI, 29	Mecheir 2	...	Wife
XIII, 32	Pharmouthi 1	...	Wife
XVI, 23	Payni 2	...	Wife
XVII, 16	Payni 16	...	Wife
P Mich. V 238			
I, 22	Sebastos 14	...	Wife
IV, 195	Neos Sebastos 25 (?)	...	Wife

[a] *Homologia apoches tropheion*.

[b] The named party or parties of the second part.

upon her are not enumerated. The loan in the following abstract is equally incomplete, having only the amount of the capital sum, 136 drachmas, and the fact that Herois has received it, still there. Whatever the truth about the wage of the nurse, lacking more evidence from Tebtunis, we must accept the prepayment as a loan since that is what it is called.

Two different ideas seem to be basic to the contract of paramone and the contract of nursing. In the former, the obligation of the worker to remain available to work is the important point, but in the latter, it is the handing over of the baby into the nurse's care. In the nursing contract the labor is secondary to the details about the care.[1] The apprentice contract contains elements of both these ideas: it involves a handing over of the child (apprentice) to the master for training and the apprentice's obligation to remain there for a fixed period.

The Apprentice Contracts

There are few apprentice contracts (διδασκαλικαί) among the anagraphai entries of Tebtunis, in fact, only seven are found in all twenty months. If so few contracts can be said to be "concentrated," they are concentrated in the last quadrimester of A.D. 42 and the first two quadrimesters of A.D. 45-6. There are no apprentice agreements at all in the last quadrimester of A.D. 45-6 and the first of A.D. 46-7.[2]

A slight similarity in distribution exists between the two

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1. Adams, Paramone, pp. 156-157.
2. See Tables 29, 35.

TABLE 35

APPRENTICE CONTRACTS

Month	Reference	Trade
	P Mich. 121	
Pachon 18	II, 12	
Kaisareios 27	XI, 13	(weaver)[a]
Epagomene 3	XII, 6	
	P Mich. 123	
Sebastos 18	II, 34	weaver[a]
Sebastos 23	III, 9	shearer
Mecheir 18	XII, 11	cobbler
Pharmouthi 23	XIV, 42	....

[a]The weaver in P Mich. II 123 II, 34 is named Papontos. In P Mich. II 121 XI, 13, the master is named Papontos and he might be the same man as the weaver.

other service contracts and the apprentice contracts. In the nursing and paramone agreements, more were found in the first two quadrimesters of A.D. 45-6 than in the third quadrimester. The exception to this is the four months at the end of A.D. 42-3, where there are more paramonai than in the other periods. The didaskalikai also seem to gravitate toward the early part of A.D. 45-6 and the final quadrimester of A.D. 42, but none appear in the consecutive eight months ending A.D. 45-6 and beginning of A.D. 46-7. Is there any significance to this dearth of apprenticeships? Or is it accidental? It is necessary to consider the economics of apprenticeship in the first century A.D. before attempting to propose any answers.

It was difficult to enter the trades that required a particular skill, since many such trades seem to have been hereditary. The only method of entry into a profession like weaving was through apprenticeship.[1] At about the age of thirteen or fourteen, when he would be mentally and physically ready to take on the labors of a craft, a youth was apprenticed to a master under one of the two possible contracts.[2] The first kind of contract was the "teaching contract"[3] in which the master craftsman taught first the rudiments and later the fine points of his profession to the youngster. The period of time in which this teaching would take place varied with the difficulty

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1. Johnson, Roman Egypt, p. 388.
2. Zambon, "Διδασκαλικαί ," p. 35. Slaves and women were also apprenticed, but there are relatively few of these appearing in the documents.
3. Westermann, "The apprentice system," pp. 295-8. The teaching contract is also called the Lehrvertraege after Berger.

of the trade, but from between one to five years may be considered usual.[1]

The apprentice at first could be of little use to his master unless he were to learn one of the lower arts which required less skill.[2] The teaching contract, because it covered this period of the pupil's learning and uselessness, would be founded on the value of the master's skill and teaching, his labor in other words, and he therefore was paid by the parents, guardian or owner of the student.[3] In addition to the pay of the master, the parents had to provide for the boy's room and board and taxes. He usually lived at home and went daily to the master to learn. In such a contract, the economic superiority was clearly the master's since he had only to teach and all the expenses were born by the family of the apprentice.[4]

The situation was reversed in the second type, the apprentice contract,[5] since the pupil was useful to the master and therefore his labor was considered to be the main point in the contract. The apprentice was paid; the master was not. Most of the extant apprentice contracts are of this type. The economic superiority was now with the apprentice and his family. As the example of P Mich. II 121 recto II, 8 shows, the master now had to bear the expenses for his pupil, Papontos, son of Onnophris and Tasookis. The boy's mother

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1. Johnson, loc. cit.
2. Westermann, "The Apprentice System," p. 299.
3. Ibid., p. 298.
4. Zambon, " Διδασκαλικαί ," p. 17.
5. Westermann, "The Apprentice System," p. 297. Also called the Lehrlingsvertraege.

apprenticed him for five years to the weaver, Horus son of Papontos, who was to pay for his clothing and food, the gerdiakon telesma (γερδιακὸν τέλεσμα) which is probably the trade license tax (χειρωνάξιον),[1] and 40 drachmas in advance. This payment is most likely the cost of the pupil's board. Since he was to live at home for the five years of his apprenticeship, the master here partially reimbursed the family for this expense. The 40 drachmas could also be a partial payment of the boy's wage, if his labor could be useful so soon to the master.[2] The mother assumed only one expense, the poll tax; the boy would then be at least fourteen years old.

The master had the use of the boy's labor in exchange for an outlay of money. The apprentice, in addition to upkeep, must have received training because the contract is listed in the anagraphe[3] as a didaskalike, not a paramone which it could be if there were only a question of labor and recompense involved.[4]

Some of the more disputed child labor contracts do seem to be paramone contracts.[5] In these, a child's labor is substituted for payment of interest on a loan[6] and the master undertook payment for the worker's upkeep as was usual in paramone agreements. There are some people who think that as the apprenticeship progressed and the

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1. Zambon, "Διδασκαλικαί ," pp. 16, 35, 55, 59; P Mich. II, pp. 39-40; Wallace, Taxation in Egypt, pp. 193-199.
2. P Mich. II pp. 39-40.
3. P Mich. II 121 verso II, 12.
4. P Mich. II 121, pp. 39-40.
5. Such as P Tebt. II 384.
6. Westermann, Slave Systems, p. 135.

youth became more skillful in the craft, the contract was either renegotiated as a paramone or, at least, the relationship took on some elements of the paramone contract.[1] Certainly, one of the main characteristics of both apprentice and paramone contracts is the clause in which the workers agree to remain for a certain period of time. Penalties or fines were fixed for absence in both contract types.[2]

Most didaskalikai which appear in the literature require the craft master to pay wage, upkeep, some or all taxes for the apprentice. We can expect that a large proportion of the Tebtunis didaskalikai would also require this expenditure, especially since the only extant abstract[3] is this type of apprentice contract. In it, the apprentice and his family (guardian or owner) would benefit materially. In difficult times, a family might reasonably wish to rid itself of the expense of feeding and clothing an adolescent son and at the same time train him for future work. The apprentice contract would be a useful device for these reasons and so one might expect that more didaskalikai would be made in a period of economic depression. On the other hand, while there may have been many applicants eager for apprenticeships at such a time, there may also have been few places for them because some of the masters lacked the ready cash to pay more craft and poll taxes and support another person, however useful he might prove in the business. The situation among

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1. Adams, Paramone, p. 127; Westermann, "Paramone," pp. 29-30.
2. P Mich. V 355, lines 12-13, for example.
3. P Mich. II 121 recto, II, 8.

the Tebtunis weavers can serve as an example.

Weavers appear most often in the didaskalikai,[1] so it not surprising that the one extant apprentice contract abstract concerns a weaver. Not all who practiced this trade were successful enough at it to set up their own establishments and hire helpers or apprentices. Some weavers had to hire themselves out. P Mich. V 355 (=P.S.I. 908) gives the example of Harmiysis, son of Petesouchos, who bound himself in a contract of paramone to Heron, son of Haryotes, for two years. Harmiysis was a weaver and agreed to "do everything that is ordered and to weave whatever Heron wishes..."[2] His remuneration was more substantial than any apprentice's since, of course, he was a producer and not a learner.[3]

Other weavers were more successful. Heron, son of Haryotes, who hired Harmiysis, was probably a weaver himself. He seems to have had enough resources to pay the poll tax (λαικὴ σύνταξις), the weaver's tax (γερδιακόν), expenses (δαπανή), one-third surtax (ἐπιτρίτος), the embankment tax (τέλεσμα χωματήας ἔργου),[4] the bath tax (τέλεσμα βαλαινευτικοῦ), the fountains tax (τέλεσμα κρήνης) in addition to 1 artab of wheat per month and 28 drachmas in silver per year for clothing and oil. Heron also had to pay these charges for himself and for the other members of his family who were liable for them. A certain Papontos, a weaver, was also successful

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1. Adams, Paramone, p. 125.
2. P Mich. V 355, lines 2-3.
3. P Mich. V 355, lines 6-10; Zambon, "Διδασκαλικαί ," p. 21.
4. This tax usually appears as χωματικῶν ἔργων ; P Mich. V p 369, note 7.

enough to take on a helper on two separate occasions, in these cases, apprentices. In A.D. 42, he was party to a contract of apprenticeship with one Heras and three years later in another with one, Herakleios.[1]

Some practitioners of a craft were successful and others were not. But despite a few failures, we would expect there would be at least one master who could afford an apprentice or, if the teaching contract were also in use in Tebtunis, at least one family that would have the resources for educating a son during the period Pachon to Choiak, A.D. 46. There seems to have been none, however. In A.D. 42 there are three apprentice contracts listed in the anagraphe for the months Pachon to Kaisareios. In the same period a few years later in A.D. 46, there are none. During the first quadrimester of A.D. 45, two contracts of apprenticeship are listed; in A.D. 46, the next year, not one. The period of eight consecutive months is too long a time to lack didaskalikai fortuitously, so we must conclude that the economic circumstances, always difficult for the Egyptian peasant, were now somewhat more difficult, so that no one entered into apprentice contracts.

Summary

In order to evaluate the significance of the service contracts in the economy of Tebtunis, we must ask two questions. First, can we consider the entrance into either a paramone agreement or a nursing agreement as a drastic action during extreme difficulty or was it

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1. The "Papontos" of each entry is not able to be identified positively with the other, as is usual with the anagraphe entries, but the possibility exists.

merely one of the few ways in which a peasant could earn some money? Second, do the number of entries made in the different months of the different years indicate that there was a change in the economic circumstances in relation to these contracts, particularly the didaskalikai?

Tebtunis was in a farming area where there would be fewer service contracts[1] because there would be less need for either skilled or unskilled non-farm workers. In a paramone contract that did not involve a loan, if such a thing existed, the skilled worker was in a better economic and social position than the unskilled. But the positions of skilled and unskilled workers in a paramone contract which did involve a loan may have been more equalized since, despite difference in skill, they were both debtors.

These workers received their pay or their loan in advance. Prepayment was supposed to be a work incentive, but it could just as well have been a liability, since repayment of a sum as large as 100 drachmas or more would be very difficult for a lower class Tebtunite. The money coverage in the Chora was rather thin, particularly among the lower classes, which would include the unskilled workers. Consequently, a man was really committing himself to something drastic when he agreed to repay 100 drachmas,[2] which would be nearly a year's pay.[3] One conclusion from this supposition might be that the

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1. Adams, Paramone, p. 33.
2. Ibid., pp. 64 and 84-5. Also Westermann,"Paramone," p. 25. This estimation of a year's pay is based on P Mich. V 241 where the worker received 10 drachmas per month for ten months and 11 drachmas for the other two months.

prepayment or the argyrion was not paid back at all if the worker completed his obligations.[1] If he did not complete the work, then the prepayment would have to go back to the creditor-employer.

Return of the argyrion or prepayment cannot have been a penalty in all cases, however. Other penalties are specified in the contracts. The workers had to face fines or an extension of the time of the work contract, if they were absent during the agreed upon period.[2] There seems to be a difference of opinion as to whether the workers under a paramone agreement and the apprentices had any free days for festivals.[3] Whatever the truth in this case, there were fines of one to two drachmas a day for each day missed,[4] or the worker or apprentice had to make up the time after the contract terminated. This penalty system was a reasonable way for the employer to get full value for his money when the prepaid incentive was not incentive enough. The penalties attached to non-fulfillment of terms form part of the power which the employer had over his employee or debtor. The worker-debtor was not a slave nor even a serf, but his freedom of movement was curtailed, as is anyone's freedom of

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1. Adams, Paramone, p. 84.
2. Westermann, "Paramone," pp. 19-21 places a great emphasis on the extension of service for either absence or inability to repay the argyrion. He concludes that if such extensions were widespread it would have resulted in a "peonage of the unskilled."
3. Westermann, "Apprentice System," p. 303 thinks that there were holidays for workers; H. Youtie, "The Heidelberg Festival Papyrus; a Reinterpretation," in Studies in Roman Economic and Social History in Honor of Allen Chester Johnson, ed. by P.R. Coleman-Norton (Princeton: University Press, 1951), p.203 believes that apprentices and paramonarioi had no free time allowances.
4. P Mich. V 355 line 12.

movement when he commits himself to a job. The worker had to "remain" (paramenein)available for his employer. The fact that the worker also agreed to "do all that is ordered" ποιοῦντα τὰ ἐπιτασσομένα , has been taken by some to meantthat he was little better than a serf and subject to corporal punishment for disobedience.

Certainly, it is reasonable to expect that a master could and would strike a recalcitrant young apprentice, but it is difficult to derive such a power over a free adult from the phrase "do all that is ordered."[1] So, binding oneself to a paramone contract was a drastic action, but only because repayment of the advance sum was often difficult, not because the worker subjected himself to a slave's treatment.

The employer of the wet nurse, however, did have more control over her freedom of movement, a control made more personal by the nature of her work. She did not have to live in the employer's house in most cases, but she did have to appear regularly for examination of the child and herself. If she failed to fulfill the contract, with its many rules and restrictions, she and her husband had to face stiff penalties: forfeiture of past and future wages, a fine of 200-500 drachmas and 50 percent of the wage. In addition, the couple sometimes had to pay an equal fine to the fiscus.[2] The penalties for the wet nurse seem to be more severe than those for the paramonarioi. If a 100 drachma fine were difficult to repay, a 1000 drachma fine or more would have been impossible. The stringent penalties for possible

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1. Adams, Paramone, pp. 121-4. P. Koschaker, according to Adams, believes that this phrase indicated a punishment right over both the paramonarios and apprentice; Adams disagrees.

2. Johnson, Roman Egypt, pp. 286-290.

non-fulfillment of the contract were coupled to the emotional strain of having to surrender the child to his owner at the end of the period. Ancient literature often mentions the attachment of the nurse to her temporary charge and although the literary treatments are sentimental, the emotions of the participants must have been real, nevertheless.[1] The nursing contract, then, appears to be somewhat more rigorous in its demands upon the debtor-employees than some of the other service agreements and this may account for the relative scarcity of this type of contract in the papyrological literature.

The worker in a nursing contract was unskilled in the sense of being trained in a craft, although it must have taken some skill to raise a child through the first three years in the adverse sanitary conditions of Roman Egypt. There is, however, evidence that shows that there was a mixture of both skilled and unskilled persons involved in the other service contracts. It is obvious that the trained man would practice his craft under a paramone contract, but what sort of work did the unskilled person do? One suggestion is that he was a general handyman, a person who did odd jobs. These odd jobs undoubtedly included farm work during the busy planting and harvesting seasons. Were these so-called unskilled workers, farmers who elected to work as a laborer for a year instead of leasing land to work for themselves? In other words, was the paramone contract a lease substitute for certain segments of the working group during a year of a bad flood?

If a man elected to make his year's living from general labor

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1. Adams, Paramone, p. 157.

instead of his usual farming on leased land, we would expect to see many fewer leases and many more paramonai appear in the registers. There are many fewer leases. When comparing the first quadrimesters of A.D. 45-6 and A.D. 46-7 we see that there were seventy-seven leases recorded in the anagraphai during the first months of the earlier year and forty-eight in the later year. Unfortunately, for this theory, the paramonai contracts do not show a proportional increase commensurate with a move of a large group of people from farming into labor because of a bad flood. There are, in fact, only three more service contracts in the first quadrimester of A.D. 46-7 than in the previous year. The same is true for nursing contracts.[1] These, however, show a drop in the modal (average) amount of the advance loan from 120 to 100 drachmas. The employers were paying less for wet nurses in A.D. 46 than in the year before.[2]

The entries for the apprentice contracts do exhibit an unusual fluctuation in volume because none appears at all during the eight months between Pachon ro Choiak, A.D. 46. Except for these didaskalikai, then, the number of different types of service contracts which appear in the registers do not indicate that any extraordinary economic problems hit the Tebtunites during the sixteen months from Sebastos, A.D. 45 to Choiak, A.D. 46, but there was a slump in the economy.

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1. Table 29.
2. Table 33.

Miscellaneous Contracts

The contracts connected to marriage, parental division, and sales and cessions have a more indirect relationship to the state of the flood and general economy than perhaps the leases or loans. Nevertheless, a study of their volume, distribution, the amounts of money involved and other pertinent data should add some peripheral information which can be useful to the overall picture of Tebtunis in A.D. 45-7.

Marriage Contracts

A discussion of marriage contracts invariably revolves around the legal questions of what constituted marriage, the status of the wife, and the difference between an ἄγραφος γάμος and an ἔγγραφος γάμος . But we are concerned here with the main function of marriage contracts: property settlement and other subjects related to family economics. Primarily, the marriage contracts can serve as indirect economic indicators in their monetary amounts and distribution.

There are two main types of marriage contract: the alimentary agreement and the dowry agreement. These appear in various forms in the three registers. The alimentary contract is always entered in P Mich. II 121 as συγγραφὴ τροφῖτις but in P Mich. II 123 and V, 238 it also shows up as the hybrid συνγγραφὴ τροφῖτις φερνῆς . The dowry contract is usually entered as either a homologia phernes or syngraphe phernes, although occasionally other forms, which may have been caused by scribal error, appear.[1]

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1. Such as the homologia syngraphe gamou of P Mich. V 238, II, 91.

All but two of the alimentary contracts are entered in the final quadrimester of A.D. 42 (P Mich. II 121); the others are found in Sebastos and Neos Sebastos of A.D. 45 (P Mich. II 123).[1] There are no alimentary contracts at all entered in the anagraphai for the thirteen-month period of Choiak, A.D. 45 to Choiak, A.D. 46.

The last four months of A.D. 42 are particularly rich in both alimentary and dow ry agreements; thirty in this period compared to nine three years later and thirty-nine marriage-related contracts in the other sixteen months. The quadrimester which shows the fewest entries for this variety of transaction is the first part of A.D. 46-7 when there are only five dow ry agreements recorded and something called a syngraphe gamou. A further glance at these property settlements may aid in evaluating the distribution.

The alimentary contract was a property settlement made by a husband and wife at some point in their marriage, usually after the birth of children.[2] The five abstracts for the alimentary contracts of P Mich. II, 121[3] show that the original contracts enumerated the property of the husband, the parapherna, jewelry and dow ry of the wife. In addition to the dow ry sum another figure is mentioned in both the abstract and the anagraphe entry. This figure appears as " x chrysoi (χρῦσοι) ."

The chrysou payment seems to have originally been or been

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1. See Table 36.
2. W.F. Edgerton, "Notes on Egyptian Marriage chiefly in the Ptolemaic period," in Studies in Ancient Oriental Civilization, Vol. I, Part I, ed. J.H. Breasted (Chicago: University Press, 1931), p. 3.
3. P Mich. II 121 recto II, 2; III, 1; III, 7; III, 12; IV, 4.

TABLE 36

CONTRACTS RELATED TO MARRIAGE

Month	Dowries[a]		Alimentary Contracts		Quadrimester Totals All Marriage Contracts	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
Sebastos	2	1	0	0	13	6
Phaophi	1	0	0	0		
Neos Sebastos	4	2	1	0		
Choiak	4	3	0	0		
Second Quadrimester	P Mich. 123		P Mich. 123		P Mich. 123	
Tybi	1		0		12	
Mecheir	7		0			
Phamenoth	0		0			
Pharmouthi	4		0			
Third Quadrimester	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121
Pachon	2	3	0	6	9	30
Payni	1	1	0	1		
Epeiph	2	3	0	0		
Kaisareios	4	4	0	8		
Intercalary Days	...	2	...	2		

[a]The dow ry contracts are found in the form of sungraphai and homologiai. In P Mich. 123, 15 out of 32 dowery contracts are sungraphai.

substituted for the Ptolemaic deben (or teben) which appeared in Demotic marriage contracts. The deben did not actually change hands at the time of the drawing up of the alimentary contract because it was a fictitious payment used to fix the sum which the husband would have to pay in case of divorce.[1] These penalties appear in the anagraphe of A.D. 42 in the conventional amounts of 11, 21, 31 and 51 chrysoi. What the Tebtunis abstracts show is that the chrysous payment was proportional to the size of the dowry.

The wife's dowry in two of the abstracts is large, 200[2] and 300[3] drachmas. The divorce penalty for this amount is said to be 21 chrysoi. In the other three abstracts the dowry in each case is 60 drachmas and the penalty sum is 11 chrysoi. When the chrysoi reach 31, the corresponding dowries must be higher than three hundred drachmas which has a 21 chrysoi payment.

It is less likely that the chrysoi would depend on the size of the husband's property. The evidence for this is found in the same two abstracts. In P Mich. II 121 recto II, 2 one of the longest in eiromenon, the parents of the husband, Dionysios, enumerated all their property which would be his. That property was considerable: 8-3/4 arouras of land near Theogonis in seven parcels; a house in Tali; 1-1/2 bikoi of land in Tali; 2 bikoi of land in Tali; a half-share in the cattle and other personal property of the husband's parents.

The husband in the other abstract, P Mich. II 121 recto III, 7,

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1. A.E.R. Boak, "Alimentary Contracts from Tebtunis," JEA 12 (1926), p. 108.
2. P Mich. II 121 recto II, 2.
3. P Mich. II 121 recto III, 7.

did not have the possession of property or the potential for possession that Dionysios did. Petesouchos, son of Harmysis, declared that he owned a whole house and court, a plot of ground in Tebtunis and shared in another house from his father. Yet Petesouchos, had he divorced his wife, Thaubastis, would have had to pay the same fine of 21 chrysoi, as Dionysios.

The eleven chrysoi penalty accompanied a dowry of 60 drachmas in each of the other three abstracts. The husband's property in each case was rather meager, and the jewelry and parapherna of the wives was very small compared to Thaubastis and Tamarres, who commanded twenty-one chrysoi each. The chrysous was equivalent to 20 silver drachmas,[1] which would provide a divorce penalty of 220 drachmas for the poorer wives and 420 drachmas for the richer.

The evidence for the chrysoi's being set in proportion to the size of the dowery is borne out by two pairs of entries in the anagraphe of A.D. 42. Both of these entry pairs provide examples of alimentary contracts made separately from the dowry. In the first case, Thatres, daughter of Petesouchos, entered into a homologia phernes with her husband, Hatres. Her dowry was very small, only 40 drachmas.[2] The next entry[3] records the alimentary contract made between Thatres and Apunchis, who is probably the father of Hatres.[4] The alimentary sum is also very small, eleven chrysoi.

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1. P Mich. II p. 33.
2. P Mich. II 121 verso X, 10.
3. P Mich. II 121 verso X, 11.
4. P Mich. II 121 verso p. 18, note 11. Cf. recto, II, 2 where the parents of the husband entered into the contract with the wife.

In the second case, the sums are higher.[1] On the third epagomenal day, Haryotes "and others" entered into a homologia phernes with Didymos "and others." The dowry sum was 1,000 drachmas. Haryotes made another contract the same day,[2] this time a syngraphe trophitis with Herakl(eia ?),and the alimentary sum was the highest one listed in the anagraphe, fifty-one chrysoi. It is evident from both the eiromenon and the anagraphe that the alimentary sum was made in accordance with and in proportion to the size of the wife's dowry.

The chrysoi in the anagraphe range from 11 to 51 in the following distribution: 11 chrysoi - 10 entries; 21 chrysoi - 5; 31 chrysoi - 1; 51 chrysoi - 1. This shows that there were 50 percent more small dowries (of between 60-200 drachmas) than medium-large dowries (of 200-300 drachmas) and 100 percent more than the very large dowries covered by the 31 and 51 chrysoi (dowries of more than 300 drachmas). There were, in fact, several very large dowries.

The Dowries

The amounts given for dowries in the three anagraphai range from 16 drachmas to 1,600 drachmas.[3] The average size of dowries in the year A.D. 45-6 (P Mich. II 123) is 141.6 drachmas; the average for the beginning of the next year is 282.9 drachmas and the average for the last third of A.D. 42 is 222.8 drachmas. The modal amounts

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1. P Mich. II 121 verso XII, 3. The "and others" probably indicates the participation of the couple's parents, pp. 19-20,note 3-4.
2. P Mich. II 121 verso XII, 4. This couple, Haryotes and Herakl(eia), may be the same people as the Haryotes and Herakleia who were members of one of the richest families in Tebtunis at this time, the family of Lysimachos, son of Didymos. See P Mich. V p. 17 and Chapter I, Chart IV.
3. See Table 37.

TABLE 37

CONTRACTS RELATED TO MARRIAGE

Reference	Form of Entry[a]	Date	Amount in Drachmas[b]
P Mich. II 121 verso			
I, 5	1	Pachon 3	32
I, 6	2	Pachon 4	21[b]
II, 6	2	Pachon 16	21[b]
II, 8	3	Pachon 16	540
II, 15	2	Pachon 18	21[b]
III, 1	2	Pachon 24	21[b]
III, 6	2	Pachon 25	11[b]
III, 8	1	Pachon 26	200
III, 10	1	Pachon 26	32
III, 11	2	Pachon 26	11[b]
IV, 12	1	Payni 17	32
V, 6	2	Payni 27	11[b]
V, 12	3	Epeiph 2	200
VI, 2	1	Epeiph 8	100
VI, 9	1	Epeiph 9	20
VII, 15	1	Epeiph 14	20
IX, 20	2	Kaisareios 16	11[b]
IX, 21	2	Kaisareios 16	11[b]
X, 1	1	Kaisareios 16	40
X, 2	2	Kaisareios 16	11[b]
X, 3	2	Kaisareios 16	21[b]
X, 10	1	Kaisareios 16	50
X, 11	2	Kaisareios 16	11[b]
XI, 12	2	Kaisareios 27	11[b]
XI, 16	1	Kaisareios 28	1,000

TABLE 37 - Continued

CONTRACTS RELATED TO MARRIAGE

Reference	Form of Entry[a]	Date	Amount in Drachmas[b]
XI, 17	2	Kaisareios 28	11[b]
XI, 18	2	Kaisareios 28	31[b]
XII, 3	1	Epagomene 3	1,000
XII, 4	2	Epagomene 3	51[b]
XII, 5	2	Epagomene 3	11[b]
XII, 14	1	Epagomene 5	40
P Mich. II 123 recto			
I, 10	1	Sebastos 12	32
II, 11	1	Sebastos 12	28
II, 19	3[c]	Sebastos 12	16
II, 33	3	Sebastos 18	200
II, 48	3	Sebastos 21	20
V, 22	4	Phaophi 18	200
VI, 10	4	Neos Sebastos 1	100
VI, 26	3	Neos Sebastos 8	...
VII, 12	1	Neos Sebastos 18	40
VII, 13	4	Neos Sebastos 18	200
VII, 19	3[d]	Neos Sebastos 19	100
VII, 28	3	Neos Sebastos 21	60
VII, 31	5	Neos Sebastos 24	140
VIII, 2	3	Choiak 1	86
VIII, 13	3	Choiak 7	46
VIII, 17	3	Choiak 10	60
VIII, 24	1	Choiak 14	100
VIII, 34	1	Choiak 21	20
IX, 2	1	Choiak 27	160
XI, 10	4	Tybi 29	160
XI, 21	1	Mecheir 2	20

TABLE 37 - Continued

CONTRACTS RELATED TO MARRIAGE

Reference	Form of Entry[a]	Date	Amount in Drachmas[b]
XI, 31	4	Mecheir 3	60
XII, 12	6	Mecheir 18	40
XII, 17	4	Mecheir 22	108
XII, 19	1	Mecheir 22	40
XII, 28	4	Mecheir 30	200
XII, 29	4	Mecheir 30	200
XIII, 9	3	Phamenoth 16	60
XIV, 1	1	Pharmouthi 5 (?)	...
XIV, 20	4	Pharmouthi 13	120
XIV, 21	4	Pharmouthi 13	1,600
XIV, 30	4	Pharmouthi 16	60
XV, 19	3	Pachon 7	40
XV, 23	4	Pachon 12	60
XVI, 25	3	Payni 2	80
XVII, 8	7	Payni 11	60
XVIII, 34	3	Epeiph 13	60
XVIII, 38	4	Epeiph 16	200
XVIII, 45	1	Epeiph 18	...
XIX, 26	3	Epeiph 29	60
XXI, 18	4	Kaisareios 6-9	420
XXI, 24	4	Kaisareios 9	28
XXI, 35	3	Kaisareios 20 (?)	300
XXI, 41	1	Kaisareios 20 (?)	...
XXII, 32	1	Kaisareios 30	...
XXII, 33	8	Kaisareios 30	...
P Mich. V 238 recto II, 91	9	Sebastos 30	...

TABLE 37 - Continued

CONTRACTS RELATED TO MARRIAGE

Reference	Form of Entry[a]	Date	Amount in Drachmas[b]
III, 116	3	Phaophi 7	200
III, 149	10	Neos Sebastos	320
IV, 182	10	Neos Sebastos 19	200
IV, 196	3	Neos Sebastos 20	...
V, 219	10	Choiak 9	200
V, 227	10	Choiak 16	500
V, 228	10	Choiak 16	500
V, 243	3	Choiak 27	60

[a]The codes for the forms are: 1) homologia phernes 2) syngraphe trophitis 3) homologia apoches phernes 4) syngraphe phernes 5) syngraphe trophitis phernes 6) homologia gamou phernes 7) (lacuna) phernes 8) syngraphe apoches phernes 9) homologia syngraphe gamou 10) trophitis phernes.

[b]Alimentary sums are in chrysoi.

[c]The scribe has "hyponema" here for homologia.

[d]This is a homologia apoches phernes perilyseos.

for the same time period are: 60 drachmas (A.D. 45-6), 200 drachmas (A.D. 46) and 30 drachmas (A.D. 42). Table 38 presents the distribution of dowries sizes for all months.

TABLE 38

SIZE OF DOWRIES IN A.D. 42 AND A.D. 45-7

Size in Drachmas	Number of Examples[a]
10 - 59	21
60 - 99	12
100 - 299	21
300 - 599	6
600 (and above)	3

[a]All the dowery contracts and receipts are included.

From Table 38 it appears that, in these years at least, the small dowary of from 10 to 59 drachmas and the moderately large dowry of 100 to 299 drachmas were the commonest among the Tebtunites. There are also three very large dowaries recorded, one of 1,680 drachmas in A.D. 45 (Pharmouthi 13) and two of 1,000 drachmas each in A.D. 42 (Kaisareios 28 and Epagomene 3).[1] There would be more of the smaller dowries in a farming community like Tebtunis, where there was relatively little money and only a few "upper class," that is wealthy, propertied families, who enter into formal alimentary contracts or give large dowries to their daughters.[2]

1. P Mich. II 123 XIV, 21 (1,600 drachmas) and 121 XI, 16 and XII, 3, (1000 drachmas).

2. Johnson, Roman Egypt, p. 292.

After viewing both the distribution of the marriage-related contracts, it is evident that while there are more dowries and alimentary contracts recorded in the last quadrimester of A.D. 42, the size of the money involved is smaller in most cases than in the first four months of A.D. 46. During this later period there are only six of these matrimonial agreements in the anagraphe and the dowries are quite large, 200, 320, and 500 drachmas.

When comparing the time in A.D. 42 with the later year and one-third, we notice that the syngraphe trophitis no longer appears in the same entry form in the later period. This does not mean that families were not making property settlements, since there is a transaction listed as a syngraphe trophitis phernes. The Tebtunites, in the years between A.D. 42 and A.D. 45-6, may have changed to using one document that encompassed the entire agreement in all its parts where formerly two (the alimentary and dowry contracts) were used. The alimentary contract, therefore, did not disappear because the economic conditions prevented property settlements from being made, but became a hybrid in form.

It is more significant that the few matrimonial contracts in the beginning of A.D. 46-7 have such large dowries. If the years A.D. 44-45 and 45-46 were famine years, perhaps fewer property settlements were made due to uncertain conditions. In a famine situation, only the wealthiest people would enter into formal contracts since their economic level would be high enough so that adverse economic conditions in the Fayum would have relatively little

effect on them.[1] We may say that the distribution of the matrimonial settlements and contracts show that there could have been a famine or some other unsettled economic situation.

Property Divisions

Some members of the Tebtunis community owned a great deal of property and if they also had a large family, a frequent circumstance, it appears,[2] eventually the necessity arose for the property to be divided among the heirs. A Tebtunite could, by means of a will, provide for the disposal of his property after death. The grapheion, however, was not the bureau through which wills and testaments passed and so none appears in the anagraphai or among the other documents. Instead, divisions of property occur in two forms: the meriteia and the diairesis.

The meriteia (μεριτεία) involved the division of an estate by parental apportionment which went into effect either before or after the death of the parents. There are several variations possible for this type of contract: grandparents rather than parents could be the dividers; the document could fix only the proportion of the shares; the parents could assign all the property to all the heirs at once, or partly to one or more of the heirs.[3] The nature of the entries makes it impossible to ascertain which type of document is listed in the anagraphai, but the one extant meriteia in

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1. Of course, we do not know how many matrimonial settlements were made in the remainder of the year A.D. 46-7.
2. Consider the four large and wealthy families of Lysimachos, Herakleides, Eutychos and Psuphis, P Mich. V, introduction pp. 17-22.
3. A.M. Harmon, "Egyptian property returns," YCS 4 (1934), pp. 146-7.

the Tebtunis corpus that corresponds to an entry[1] is a partial parental apportionment, effective immediately. Division could also be brought about by testament (διαθήκη) and by apportionment effected through an agreement between the heirs themselves, (διαίρησις). Sometimes the diairesis supplemented a meriteia and sometimes it was independent of any previous settlement or will because the property was held in common by heirs of an intestate.[2] There are few examples of these two divisions in the registers of the mid-first century. In the year A.D. 45-6, there is a total of only fifteen divisions: ten diaireseis and five meriteiai. The first quadrimester of the following year has four parental divisions and one division among heirs with common property. The register for A.D. 42 has an equal number of meriteiai and diaireseis: four of each.[3] Since both the diaireseis and meriteiai comprise only 2 percent of the total contracts for the year A.D. 45-6 and 2 percent for all extant months, divisions and apportionments may be considered among the least common of the contract types in the registers and a less preferable way to transfer property than through a testament (diatheke). Either that, or there were relatively few people who had either enough property or multiple heirs to need apportionment.

The Tebtunites probably used the parental apportionment, as people in other villages did, to confirm the regular succession and

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1. P Mich. V 322a = V, 238, 151.
2. V. Arangio-Ruiz, La successione testamentaria secondo i papiri greco-egizi, (Naples: L. Pierro, 1906), p. 182; Taubenschlag, Law[2], pp. 220-1.
3. Table 39.

to avoid the judicial proceedings in which their children would have to become involved if their inheritance were to come to them undivided or without a will.[1] The fact that there are more diaireseis, however, especially in the year A.D. 45-6 when there are twice as many diaireseis as meriteiai (that is, ten of the former and five of the latter), may indicate that parental apportionment (meriteia) was not the preferable method of providing for inheritance in Tebtunis at this time.

In the anagraphe entries for the meriteiai there is usually no mention of the object of the division. Occasionally, however, the recipients of the division are noted as in P Mich. II 123 VII, 22 where they are the sons and wife of the divider. The entries for the diaireseis on the other hand, frequently do state the object of the settlement: either a house or an oikopedon and sometimes land.[2]

But the nature of the property divided in these contracts and the economic level of the people involved in the divisions can best be seen in the few extant diaireseis and meriteiai. Of the seven documents four are diaireseis,[3] and two are meriteiai.[4] These documents are particularly interesting for their detail: the meriteia of Psuphis and his family; the meriteia of Orseus and his sons and the diairesis of the Herakleides family.

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1. V. Arangio-Ruiz, op. cit., p. 11.
2. Table 39.
3. P Mich. V 318-20; 323-5; 326; 327.
4. P Mich. V 321 and 322a. The seventh, 317, is too illegible to read.

TABLE 39

APPORTIONMENTS AND DIVISIONS

Reference	Type[a]	Date	Object or Participant
P Mich. II 121 verso			
I, 7	2	Pachon 4	...
I, 9	1	Pachon 5	...
VI, 13	2	Epeiph 11	epauleos
VIII, 9	2	Epeiph 30	...
VIII, 13	2	Epeiph 30	house
IX, 4	1	Kaisareios 5	...
X, 6	1	Kaisareios 16	...
XI, 19	1	Kaisareios 29	...
P Mich. II 123 recto			
II, 29	1	Sebastos 16	...
IV, 30	2	Phaophi 8	oikopedon
VII, 22	1	Neos Sebastos 19	sons and wife
VII, 44	2	Neos Sebastos 28	share of house and slaves
VIII, 20	1	Choiak 12	lacuna
XII, 16	2	Mecheir 22	oikopedon
XII, 30	1	Mecheir 30	with sons
XII, 43	2	Phamenoth 4	4 ars. epiboles komes
XIV, 6	2	Pharmouthi 5	...
XV, 30	2	Pachon 13	oikopedon
XVIII, 41	2	Epeiph 17	oikopedon
XVIII, 43	2	Epeiph 17	12 ars. gorgias
XXI, 25	1	Kaisareios 9	...
XXII, 10	2	Kaisareios 24-28	...

TABLE 39 - Continued

APPORTIONMENTS AND DIVISIONS

Reference	Type[a]	Date	Object or Participant
P Mich. V 238			
I, 42	1	Sebastos 25	...
III, 151	1	Neos Sebastos 4	...
V, 236	1	Choiak 19	...
V, 245	2	Choiak 28	edaphos
V, 247	1	Choiak 30	...

[a]Meriteia = 1, diairesis = 2.

The meriteia of Psuphis, also called Harpokration, and his wife, Tetosiris, also called Dionysia, is one of the only extant documents to be listed in the anagraphe, where, on Neos Sebastos fourth[1] it is entered as ὁμο(λογία) Ψύφιος πρὸ(ς) υἱο(υς) μεριτείας ἀργ(υρίου) (δραχμῶν) μ. The corresponding document, P Mich. V 322a, shows that Psuphis and Tetosiris owned a large amount of property and were parents of a fairly large family consisting originally of three sons: Onnophris, Psuphis and Psenkebkis and two daughters: Tamarres and Thaubastis. Psenkebkis was dead

1. The date of the contract according to lines 1 and 49 was the fifth of Neos Sebastos.

by the time of this contract and his place was taken in the division by his son, Psenkebkis. Also considered in the division was another grandson, Psuphis, son of Onnophris. The division actually concerned the male heirs more than the female heirs, who had already received their share of the property as dowries and as part of an alimentary settlement, but these distributions were nevertheless mentioned again in this contract.[1]

With the exception of one female slave and her two children, all the property apportioned by Psuphis and his wife among their children and grandchildren was real property of various types. The movables such as furniture, cattle and utensils were not enumerated. Since the family was a priestly one and connected to the Temple of Sobek in Tebtunis, much of the real property is sacred land. Among the sacred land parcels there are 3 arouras of sacred land of Sobkneptunis near Tebtunis,[2] a pastophorion in the temple enclosure of Sobek,[3] another 2-23/32 arouras of sacred land near the village,[4] 1-1/2 shares of 5 pastophoria in the outer precinct of the temple of Sobek in Tebtunis,[5] a hay barn in the outer precinct of the Sobek temple.[6]

In addition to sacred land or other property within sacred areas, Psuphis owned 5 arouras of a kleros, formerly owned by

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1. P Mich. V 322a lines 17-20.
2. P Mich. V 322a, lines 3-4.
3. P Mich. V 322a, line 5.
4. P Mich. V 322a, lines 6-7 and 23-25.
5. P Mich. V 322a, lines 11-12.
6. P Mich. V 322a, lines 13-14.

Noumenios (which he had parceled out to his daughters), and 5 houses and various lots and building sites. Tetosiris owned 9 arouras of katoikic allotment and 3 arouras of vineland.[1] Psuphis' possessions, therefore, exhibit a homogeneity which reflects the family's connections with the priestly group in the village while the size of the divided property reflects the family's comfortable circumstances.

The two sons, Onnophris and Psuphis, and the grandson,Psenkebkis, gained the greater part of the patrimony and shared almost equally in it. The only differences among the three is that Onnophris, the eldest, received 3 arouras of sacred land and a pastophorion in addition to the other apportionments which he shared with his brother and nephew. Possibly, this is an example of the advantage of primogeniture, but Onnophris' extra allotment did not give him double the portion of his co-heirs nor did it give him two-thirds of the whole patrimony, which amounts have been suggested for the eldest son's share.[2]

This parental division determines proportional succession, necessary because there were grandchildren as well as children involved. Psenkebkis replaced his dead father as one of the main heirs while the other grandson, Psuphis, received only a small portion from his grandmother's property since he would, in the future, inherit from his own father Onnophris. This meriteia, then, would have required a

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1. P Mich. V 322a, lines 25-5.

2. A.M. Harmon, "Egyptian property returns," YCS 4 (1934),pp. 142-146 speaks mainly about intestate succession,where either by law or custom,there was an advantage of primogeniture,but to what extent is not certain. It is interesting to note that Tetosiris provides for the younger surviving son and the two grandsons in her part of the apportionment since Onnophris,the eldest,had already received a large share from his father.

supplementary diairesis at some time in the future when the three main heirs who held the common property wanted to divide it further. Aside from determining succession in a complicated case, this meriteia may also have served as the Egyptian way of providing for retirement.

One of the clauses in this meriteia states that the three main heirs will have full and immediate legal control over their allotments, being able to sell, mortgage, and alienate it without the presence of their parents. In exchange, the three men will support their parents for the rest of their lives with 2 artabs of wheat and 6 cotylae of oil per month and 300 drachmas a year for clothing and expenses. In addition, the heirs must pay their outstanding bills and taxes and provide a funeral befitting their status.[1] This amount of support would have probably been more than the minimum necessary for existence since Psuphis and Tetosiris expected a funeral "befitting their station in life"[2] and would certainly have expected support of the same sort for their final years of life. Psuphis and his wife would have a "retirement income" and respite from his work.

Psuphis was a priest,[3] and aside from his priestly duties, he must have worked his land and possibly leased it, throughout his life. But at age sixty-nine he must have decided that it was time to be content with "retirement," although we can imagine Psuphis giving his children liberal amounts of advice on the management of his former possessions since he seems to have liked being in the center of things

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1. P Mich. V 322a, lines 29-34.
2. P Mich. V 322a, line 34.
3. P Mich. V 322a, introduction, p. 266.

even to the point of dictating this long and involved document himself.[1]

The parental apportionment with immediate effect which provided for the support of the relinquishing parties could have meant "retirement" and "pension" for them. There were, however, other varieties of meriteia of which P Mich. V 321 is an example. It is dated the fifth of Choiak, A.D. 42, that part of the year which is missing from the anagraphe in P Mich. II 121. In this meriteia Orseus also called Herodes, age sixty-five, divided his property among his four children, Nestnephis, Papontos, Esouris and Taapollos. But while this apportionment was to become effective after his death (μετὰ τὴν τελευτήν), the heirs were to take over use of their inheritance at once.[2]

As in the apportionment of Psuphis, the eldest seems to have received slightly more than his two brothers, but in return all the responsibility for tax paying and support of his parents fell on him alone. Nestnephis received two arouras of a katoikic allotment near Theogonis, one-fourth of the building sites (οἰκόπεδον) in Talei, and one-third of the furniture and household goods and any money due Orseus. The two other brothers each received one-fourth of the building sites in Talei and one-third of the furniture and household goods. The sister, Taapollos, received the least, only one-fourth of the building sites in Talei with no mention of her dowry.

In exchange for his greater share Nestnephis had to pay all the

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1. P Mich. V 322a, introduction, p. 266.
2. P Mich. V 321, introduction, p. 260.

public charges on the 2 arouras, support for his father and mother, and the tax on flute playing and music for Orseus. In addition, Nestnephis was obliged to give his two brothers 60 drachmas each on the death of his father, probably in consideration for his having inherited the extra 2 arouras.[1]

Orseus seems to have been a flute-player by profession who did well enough to support a family of six and own some land. It is likely that Orseus, who was about sixty-five years old, intended to continue his work since Nestnephis had to pay the (trade?) tax on flute-playing and music for him. His continuing work may explain why the amount of support is so much smaller in this contract than in the previous one. Orseus was to receive only 12 artabs of wheat and 12 drachmas per year. The wheat allotment per month would not be enough for Orseus and his wife if the average consumption of wheat per person per month was 1 artab.[2] The Tebtunites used cash for tax paying or clothes buying. If Nestnephis paid the flute-playing tax for his father, Orseus and his wife would stillhave to pay the other personal taxes,[3] and this cash would have to come from his pay for playing the flute. This amount of support probably does not reflect the minimum necessary for existence at this time in Tebtunis, but rather a supplemental income which provided a bit of security for a man of moderate means and a simple life style. The people who were less wealthy than Psuphis could not afford retirement, or

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1. P Mich. V 321, introduction, p. 259.
2. Johnson, Roman Egypt, p. 301.
3. Wallace, Taxation in Egypt, p. 170; 428, note 3. The age of exemption from the poll tax was 62 (over 61 years),so Orseus, at 65, no longer had to pay that tax.

rather their children could not afford to support them on holdings as meager as Orseus' holdings. This meriteia, then, constituted a form of partial pension for Orseus the flute-player.

After a property owner apportioned his holdings out to his heirs through a meriteia, either one effective immediately as in the case of Psuphis or one legally effective after the death of the holder, the heirs had to further divide the property among themselves through a diairesis, when they legally controlled it in common. Such a diairesis is in the one drawn up by the six children of Herakleides, son of Maron.[1] The property which they held in common was substantial, consisting of 112-7/8 arouras of various types of land and 18 slaves.

The Herakleides family seems to have been the wealthiest one of which we have any record in Tebtunis at this time. They owned large amounts of land in large parcels and they also had many slaves in an area where slaves were not common. Two of the slaves were even specialists; one is called Narkissos the barber and the other is Narkissos the muleteer.[2] One would expect to find slaves with special tasks in a larger household with several slaves, although there are some slaves trained for weaving among the all-purpose variety usually found in these documents.

The land is said to be either katoikic or a vineyard. The katoikic land predominates in the list of 112 arouras. While it is easy to surmise that holding sacred land indicates that the holder is

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1. P Mich. V 326.
2. P Mich. V 326, lines 8 and 10.

connected to the temple or is a priest, and therefore at the top of the Egyptian social stratum of the town, it is not easy to determine what holding katoikic land indicates about the social or ethnic identity of its possessor in the middle of the first century A.D. A katoikic holder might be a descendant of a Greek settler who held his allotment from one of the Ptolemies; but a katoikic holder at this time might not be a descendant of one of the original Greeks since even someone like Psuphis, who seems to be thoroughly Egyptian, numbers some katoikic arouras among his possessions.[1] The Greek names do not necessarily show anything about the family with any certainty, but the fact that descendants of this family were counted among the "Six thousand four hundred and seventy-five Hellenes of the Arsinoite Nome" during the second century A.D.[2] suggests that they were more Greek than anything else.

The Herakleides family, then, were members of the Tebtunis upper class not only by virtue of their wealth but also their nationality. They exceeded the other apparently Greek family[3] in possessions, at least according to the evidence of the surviving documents.

Only six of the eight children of Herakleides the Younger, son of Maron, participated in the division. One of the six sons, Lysas (Lysimachos) had died intestate prior to this diairesis and one

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1. See above page 236.
2. P Fam. Tebt. contains this family's documents. For the "6,475 Hellenes," see above, pp. 18-9.
3. The family of Lysimachos, son of Didymos and the Herakleides family are related by marriage. P Mich. V, p. 17.

of the two married daughters, Arsinoe, was not mentioned in the settlement.[1] All of the participants however, received approximately equal shares except for Herakleides the Elder, the first son.

Table 40 shows that the eldest son of Herakleides, received more land than his brothers or sister. Six arouras were given to him before his father's death[2] possibly to compensate for his supporting of their parents. The share of the deceased brother Lysas was evenly divided among the five brothers. The slaves were evenly divided too, except that Maron received four and Didymos only two. Whichever type of instrument previously assigned this property to the six children, it must have given them legal control over it and right of alienation since Herakleides Lourios is said to have already sold one of the parcels allotted to him in this diairesis.[3] The previous document was probably a meriteia, since itiis inconceivable that Herakleides the Younger, son of Maron, would have died intestate with such an amount of property and such a large family to divide it.

Summary

In Tebtunis during the first half of the first century A.D. the meriteia and the diairesis were the two document types used to

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1. P Mich. V 350 shows that Arsinoe had renounced all claims on her parent's property in lieu of a dowry in A.D. 37.
2. P Mich. V 326, lines 37-38.
3. Ibid.

TABLE 40

DIVISION OF PROPERTY BY THE HERAKLEIDES FAMILY

Family Member	Total Land in Arouras	Total Number of Slaves
Herakleides the Elder	21-1/4 + 31/24	3
Maron	12-11/12	4
Didymos	17-1/6	2
Herodes	13-3/4	3
Lourios	15-1/2 + 31/24	3
Herakleia	14-7/8	3
Lysas (deceased)	13-7/12	

divide property. From the extant documents we can see that one of the purposes of the meriteia was to allow the elderly landowners to pass on the burdens of ownership to their heirs and receive in exchange a kind of pension or support for the rest of their lives. The meriteia, then, might be said to be the basis for the retirement of some of the more comfortable citizens of the village. The eldest son, often receiving slightly more of the property than his siblings, usually bore the burden of this support. The diairesis, on the other hand, only settled the apportionment of property among the heirs. The meriteia, whether it took effect before the death of the parent or after, seems to have given the heirs control of and responsibility for the property. In the case of a meriteia, effective after the death of the parent, however, the property was still legally in the

possession of the parent while the control of it, as in the case of Nestnephis, son of Orseus, seems to have been the son's. The situation for the diairesis was that the heirs had full legal control of the property in common until the apportionment was settled through the document.

These documents were used by the more affluent citizens of Tebtunis, all of whom appear to have numerous progeny. Yet, less affluent men with a little land and more than one child also used these methods of passing property on to the next generation. It was not a prerogative of the upper classes of the village to draw up meriteiaiand diaireseis.

The property passed on consisted mainly of real estate and slaves. Movables, such as furniture and livestock were not enumerated. All types of land, katoikic and sacred, vineyards or vacant lots were transferred through these two documents.

Despite the fact that the meriteia and diairesis appear to be useful contract types, there are very few of them listed in the anagraphai, indicative perhaps of small numbers of medium to large families with property to divide or else the preference for using diathekai which would not be listed in the grapheion registers.

Sales and Cessions

Some sales and cessions of property valuable enough to require a contract appear in the Tebtunis anagraphai. Real property and movables such as livestock, slaves and machinery are the articles most often found as the objects of the sale or cession. What is not

found in the registers is the price of the article sold and the reason behind the sale. As for the price, we can only make estimates, and for the reasons behind the sale we can only make guesses.

There are many reasons why someone sells his property and why someone buys it. A buyer may need the thing he is buying, a donkey, oxen, a slave, a loom for his work. A seller may offer his property because he wants to make a profit and the buyer he has found offers a good price. This is true for real property as well as movables. The desire for profit may compel someone to sell his land or house.

But a seller may dispose of his property for less positive reasons as, for example, when he cannot afford to keep it. One has to feed and clothe a slave and pay taxes on him and although only the wealthier Tebtunites were likely to own a slave or two, more than that might become a burden even for them. Real property was taxed and certain categories of land, such as katoikic land, had an extra tax on it. A bad flood could force a small holder either to sell a lot or two or to become indebted just to pay for his own taxes and expenses.

It was a usual thing for a small landowner in Tebtunis to have several plots of land in different parts of the territory around the village. Most of these plots appear to be fairly small and all were hemmed in by the plots of neighbors. One can imagine disputes breaking out between one small holder and another over such things as boundaries, rights of way, a loose ox that trampled a newly seeded area or any of the other trivialities which cause people to disagree.

In such case the disputatious land owner might find it expedient to sell that lot and either buy another elsewhere or concentrate on working his other holdings. It would be an opportune moment for one of Tebtunis' entrepreneurs to appear and buy the lot, perhaps at a loss to the seller, and the entrepreneur, in turn, could lease the land and earn a profit. Also, one of the larger landowners might wish to buy the land surrounding his arouras in order to consolidate his territory.

Because there are so many possibilities behind someone selling his property, one cannot attribute many sales in one month solely to a bad flood and a famine, for example. Generally, hard times may contribute to a greater number of sales and cessions being made, but one can never be sure for all of them. The sales and cessions, then, are contracts which can be only sparingly used to gauge the economic circumstances in the years A.D. 42 and A.D. 45-46. These contracts are more useful for studying distribution, type of property and land amounts sold.

Sales

The distribution of sales in the year A.D. 45-6 follows a fairly regular pattern. Only two months of that year, Payni and Epeiph, fall far below the average of 4.25 sales per month with one sale each.[1] Neither are there any months, except Pachon with seven sales, that rise far above this average. There was no wild buying or selling of land in A.D. 45-6.

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1. See Table 41.

Upon comparison with the sales distribution for the final quadrimester of A.D. 42, it seems that A.D. 45-6 was a rather slow year for sales. In A.D. 42, there was a total of thirty-two sales in that one quadrimester alone, as compared to the fifty-one for the whole year. In the earlier year, too, there is not the evenness of distribution. Epeiph shows the entry of twelve sales while Payni has none at all.

The first quadrimester of A.D. 46-7 shows an equally uneven distribution of sales; there are twelve in Phaophi, none in Choiak and one each in the other two months of the quadrimester. Fewer sales were recorded in the anagraphe for A.D. 46-7 during the first quadrimester than in the previous year.

Sales of Real Property

Apparently the Tebtunites preferred to buy and sell livestock above real property since there are thirty-five sales of various kinds of livestock to thirty-one sales of land and houses. They also preferred to sell houses (and parts of houses) to land in the five extant quadrimesters.

At the end of A.D. 42, sixteen sales of real property were entered in the anagraphe, which is exactly 50 percent of all the sales for the quadrimester.[1] There is almost an equal division of these sales between houses and psiloi topoi, vacant lots.[2]

During the year A.D. 45-6, fewer sales of psiloi topoi are

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1. See Tables 42 and 43.
2. R. Rossi, " Ψίλοι Τόποι," Aegyptus 30 (1950), pp. 49-50.

TABLE 41

SALES AND CESSIONS

Month	Sales		Cessions		Breakdown of Sales Contracts	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238		
Sebastos	5	1	1	2	Land	19
Phaophi	6	12	1	1	Livestock	35
Neos Sebastos	5	1	1	4	Slaves	5
Choiak	4	0	0	1	Houses	22
Second Quadrimester	P Mich. 123		P Mich. 123		Looms and Other	15
Tybi	6		0			
Mecheir	2		1			
Phamenoth	4		0			
Pharmouthi	4		0		BREAKDOWN OF CESSIONS:	
Third Quadrimester	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121		
Pachon	7	7	4	0	Parachoresis	14
Payni	1	0	1	1	Enchoresis	13
Epeiph	1	12	5	2		
Kaisareios	6	7	0	1		
Intercalary Days	..	6	..	1		
QUADRIMESTER TOTALS:	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238		
	51	14	14	8		
		P Mich. 121		P Mich. 121		
		32		5		

TABLE 42

SALES OF REAL PROPERTY

Reference	Date	Object of Sale
P Mich. 121 Verso		
I, 3	Pachon 3	psilos topos
I, 4	Pachon 3	ampelitis[a]
VI, 19	Epeiph 12	1/2 of 1/3 aules
VIII, 3	Epeiph 30	half share of house
VIII, 4	Epeiph 30	half share of house
VIII, 5	Epeiph 30	shares of house
VIII, 6	Epeiph 30	1/3 share of house
VIII, 7	Epeiph 30	share of house
VIII, 18	Kaisareios 4	1/3 share psilos topos
IX, 11	Kaisareios 14	15 bikon topos
XII, 1	Epagomene 3	1/4 share of half of a house
XII, 7	Epagomene 3	part of a house + court
XII, 11	Epagomene 5	1/4 share of psilos topos
XII, 18	Epagomene 5	1/4 share of psilos topos
XII, 19	Epagomene 5	psilos topos
XII, 20	Epagomene 5	psilos topos
P Mich. II 123 recto		
II, 26	Sebastos 16	half share of ...
III, 29	Sebastos 27	2-1/2 pechon psilos topos

TABLE 42 - Continued

SALES OF REAL PROPERTY

Reference	Date	Object of Sale
V, 31	Phaophi 21	house
VI, 14	Neos Sebastos 1	1-1/2 *bikon*
VIII, 21	Choiak 12	house + court
VIII, 41	Choiak 26	1/3 share house + court
IX, 38	Tybi 5	3 *bikon*
X, 8	Tybi 10	1 *bikon*
X, 15	Tybi 10	1 *bikon*
XI, 7	Tybi 29	6 ar. *chloron*
XI, 8	Tybi 29	1/2 ar. *chloron*
XII, 33	Mecheir 30	house + court
XII, 42	Phamenoth 4	1/2 share house + court
XIII, 11	Phamenoth 16	7 ar. *chortos*
XIV, 24	Pharmouthi 14	1/2 share house
XIV, 25	Pharmouthi 14	1/10 share house
XV, 17	Pachon 6	1/2 share house
XV, 32	Pachon 14	house
XVI, 3	Pachon 19 - 26	house
XVI, 27	Payni 3	*psilos topos*
XIX, 33	Epeiph 29	house
XXI, 15	Kaisareios 6 - 9	house
XXI, 30	Kaisareios 9	... *bikon*
XXI, 36	Kaisareios 2 (?)	house

TABLE 42 - Continued

SALES OF REAL PROPERTY

Reference	Date	Object of Sale
P Mich. V 238		
III, 138 - 9	Phaophi 25	vineyard of 2-7/24 ar.
III, 142	Phaophi 30	house + storeroom

[a]Ampelitis in the Roman period is land formerly given to vines and now converted to grain, according to H.C. Youtie, "Critical Notes on Greek Papyri," TAPA 83 (1952) p. 108, note 20.

noted, but there is still a large number of houses and other land parcels as well. Two sales of land given over to the cultivation of chloron and chortos appear in the months Tybi and Pharmouthi of that year. Most of the sales of real property occur during the second quadrimester, that time which is considered "off season" for leases, but is obviously the time to buy or sell. Real property constituted 47 percent or seventy-four out of fifty-one sales in A.D. 45-6.

Real property exchanged hands in only 14 percent of the sales made in the first quadrimester of A.D. 46; that is, two out of fourteen sales. During the first four months of the previous year, 25 percent of the sales were for real property. One cannot lay this drop in sales at the door of economic adversity alone because of all the possible factors involved. It is perhaps significant that the

two sales were for a house and a vineyard, no psiloi topoi or land for cereal or fodder crops. But the fact that the greater part of the real estate sales in the previous year came in the second quadrimester, which is lacking for A.D. 46, may account for the small number in the first quadrimester, that is, if we had records for the second quadrimester of A.D. 46, we would perhaps see a larger number of real property transactions. Table 42 summarizes the distribution of these transactions.

Sales of Movables

Donkeys were the favored beasts, at least among the buyers who had their contracts entered in the anagraphai. There are twenty-nine sales of asses out of fifty-five sales of movables, or 53 percent. There seems to have been a donkey auction between Phaophi 7 and 10 in the first quadrimester of A.D. 46, because on those two days, nine donkeys exchanged hands.[1] No other animal was quite so popular in the market. There are two sales of sheep, one sale of oxen and one sale of a bull. Asses were used for transportation of people and products, especially the grain to the public storehouses.[2]

Slaves were not abundant in the Fayum, since most people were too poor to afford to buy them or to keep them. Only wealthy families such as the sons of Herakleides the Younger could afford to keep several slaves.[3] Perhaps this is the reason why only five slaves, two of which are children, are found among the sales.

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1. See Table 44.
2. E.R. Wolfe, "Transportation in Augustan Egypt," TAPA 83 (1952) pp. 80-99.
3. See above, Table 40 for Herakleides' slaves.

Only 9 percent of the sales entries record the sale of slaves.

TABLE 43

TYPES OF REAL PROPERTY SOLD BY QUADRIMESTER

Type of Real Property	P Mich. 121	P Mich. 123			P Mich. 238
	3rd Quadrimester	1st	2nd	3rd	1st Quadrimester
psilos topos	7	1	..	1	...
house (or part)	8	3	4	6	1
chloron	..	..	2	..	...
chortos	..	..	1	..	...
other land	1	2	3	1	1

The other objects in these transactions mainly come under the heading of "machinery." Ten looms (or part share of one), one anvil and a pottery stone, all used in the trades, were sold too.

There is little difference between the quadrimesters as to types of movables sold. The last quadrimester of A.D. 42 almost exclusively shows the sales of donkeys, with one loom, and two slave children to break the pattern. The sales were more varied in the longer period of time, A.D. 45-6, and in the first quadrimester of A.D. 46-7 there is another preponderance of livestock and one pottery stone. There seems to have been few purchases that an Egyptian peasant could make which were so large as to require a written contract. Their sales were limited to land, animals, slaves and machinery.

Cessions

A sale involved the alienation of property to which one had title, full ownership. A cession involved the alienation of property

TABLE 44

SALES OTHER THAN REAL PROPERTY

Reference	Date	Object of Sale
P Mich. II 121 verso		
I, 13	Pachon 5	Ass
I, 14	Pachon 5	Ass
I, 16	Pachon 5	Ass
II, 1	Pachon 11	Ass
II, 3	Pachon 14	Ass
VI, 4	Epeiph 9	Ass
VI, 5	Epeiph 9	Ass
VI, 17	Epeiph 12	Ass
VI, 18	Epeiph 12	Slave child
VII, 3	Epeiph 16	Loom
VII, 6	Epeiph 19	Slave child
VIII, 15	Kaisareios 4	Ass
VIII, 19	Kaisareios 4	Ass
VIII, 21	Kaisareios 5	Half share of ass
XI, 4	Kaisareios 23	Ass
XI, 8	Kaisareios 25	Ass
P Mich. II 123 recto		
II, 9	Sebastos 10	Sheep
II, 20	Sebastos 14	Loom
III, 19	Sebastos 25	Loom

TABLE 44 - Continued

SALES OTHER THAN REAL PROPERTY

Reference	Date	Object of Sale
V, 19	Phaophi 18	Female ass + foal
V, 21	Phaophi 18	Female ass + foal
V, 34	Phaophi 21	Bull
VI, 1	Phaophi 24	Ass
VI, 4	Phaophi 29	Ass
VII, 10	Neos Sebastos 18	Anvil
VII, 14	Neos Sebastos 18	Foal
VII, 18	Neos Sebastos 19	Loom
VII, 48	Neos Sebastos 29	Slave
VIII, 18	Choiak 10	Slave
VIII, 29	Choiak 16	Loom
IX, 42-3	Tybi 7	Sheep + goat
XII, 25	Mecheir 27	Ass
XIII, 17	Phamenoth 24	Ass
XIII, 24	Phamenoth 27	Slave
XIV, 12	Pharmouthi 7	Loom (half share)
XIV, 15	Pharmouthi 9	Loom
XV, 13	Pachon 5	Loom
XV, 18	Pachon 7	Ass
XV, 24	Pachon 12	Loom
XVI, 10	Pachon 28	Loom
XX, 28	Kaisareios 5	...

TABLE 44 - Continued

SALES OTHER THAN REAL PROPERTY

Reference	Date	Object of Sale
XXI, 16	Kaisareios 6 - 9	Bapheus
XXII, 30	Kaisareios 30	...
P Mich. V 238		
I, 48	Sebastos 25	Ass
II, 102	Phaophi 4	2 Oxen
III, 118	Phaophi 7	Ass
III, 119	Phaophi 7	Ass
III, 120	Phaophi 7	Ass
III, 121	Phaophi 7	Ass
III, 122	Phaophi 7	Ass
III, 124	Phaophi 7	Ass
III, 126	Phaophi 9	Ass
III, 127	Phaophi 9	Ass
III, 130	Phaophi 10	Ass
IV, 181	Neos Sebastos 19	Pottery stone

to which one did not have title, merely the privilege of use. Originally, in the time of the Ptolemies, this latter type of land was called "land in grant," because it was granted by the king to Egyptians and non-Egyptians for various reasons. Katoikic land, for example, was originally given "in grant" to the Greek settlers in exchange for their immigration to Egypt.[1] Other types of "in grant" land were kleruchic and hieratic land plots. At this time in Roman Egypt, the land "in grant" carried with it the right to alienation. One could lease it, pass it on to one's children through a testament, mortgage it (through a mesiteia) and sell it. However, "sell" was not the term used to describe this transaction, rather it was "cede." A cession of the special categories of land embroiled the holder in a mass of red tape, because legally he did not own the land, but actually he felt that he did.[2]

In the Tebtunis anagraphai, two types of cessions occur: the parachoresis and the enchoresis. The question is whether there is a difference between the two types of cession or whether, at this time, the terms were interchangeable. If they were interchangeable why were two different terms used? Since the Tebtunis documents suggest an answer to these questions, it is necessary to make a statement of the problem and its possible solution before viewing the distribution of these contracts and the amounts of land with which they dealt.

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1. M. Amelotti,"La ἐγχώρησις ed un papiro milanese inedito," Athenaeum N.A. 26 (1948), pp. 77-78.
2. P Mich. V 256 (A.D. 29-30) is a cession of sacred land. On line 5 the scribe has put "...I guarantee the sale (prasin)..." which indicates that the transaction was the same as a sale to the participants whatever terminology was used.

TABLE 45

CESSIONS

Reference	Type	Date	Object of Cession
P Mich. II 121 verso			
IV, 18	1[a]	Payni 19	6-1/2 ar. phylakitikou
VII, 16	2[b]	Epeiph 26	4 ar. kleros
VII, 17	2	Epeiph 26	4 ar. kleros
X, 14	2	Kaisareios 19	....
XII, 13	2	Epagomene 5	8 ar. kleros
P Mich. II 123 recto			
III, 8	2	Sebastos	3 ar. kleros
IV, 10	2	Phaophi 3	3-3/4 ar.
VI, 34	1	Neos Sebastos 9	pastophorion share
XII, 14	1	Mecheir 19	pastophorion
XV, 12	1	Pachon 4	7 ar.
XVI, 11	2	Pachon 28	1/3 share 15 ar.
XVI, 14	1	Pachon 28	....
XVI, 17	2	Pachon 29	5 ar.
XVII, 7	2	Payni 7 (?)	1 ar.
XVIII, 32	2	Epeiph 13	7 ar.
XVIII, 39	1	Epeiph 16	pastophorion
XIX, 27	1	Epeiph 29	3-1/2 heptarourikou
XIX, 31	1	Epeiph 29	pastophorion
XIX, 39	1	Epeiph 29	7 ar.

TABLE 45 - Continued

CESSIONS

Reference	Type	Date	Object of Cession
P Mich. V 238			
II, 66	1	Sebastos 28	pastophorion
II, 87	1	Sebastos 28	pastophorion
III, 141	2	Phaophi 26	2-1/8 ar.
III, 145	1	Neos Sebastos 2	pastophorion[c]
III, 150	2	Neos Sebastos 4	2 ar.
IV, 179	2	Neos Sebastos 18	2 ar.
IV, 186	1	Neos Sebastos 22	pastophorion
V, 242	2	Choiak 27	16-1/2 ar.

[a]enchoresis = 1.

[b]parachoresis = 2.

[c]This cession goes with a loan for 100 drachmas, line 146.

Enchoresis is particularly concerned with katoikic kleroi, pastophoria (hieratic land), kleroi heptarourikou, plots of seven arouras assigned to military men and kleroi phylakitikou, allotments assigned to members of the police force.[1] Each of these types of land appears in the anagraphai.[2] But the problem is that not all of them change hands through an enchoresis contract; some of them change hands

1. M. Amelotti, "La ἐγχώρησις ed un papiro milanese inedito," Athenaeum N.S. 26 (1948), pp. 77-8.

2. See Table 45.

through a parachoresis contract. If we break down the types of land ceded through these two instruments we may get a clearer picture of what the two cessions were used for. Table 46 presents this breakdown.

It is clear from Table 46 that the parachoresis is used to cede either a kleros or the land which has no special designation. The enchoresis, on the other hand, is used to cede almost every type of special land, particularly the pastophoria, yet, the enchoresis is also used in two cases to cede the land without a designation. The enchoresis is considered to be the instrument through which one passed on kleruchic land[1] and yet not once in these anagraphai does it perform that function.

TABLE 46

CESSION TYPE CORRELATED TO LAND TYPE

Land Type[a]	Parachoresis	Enchoresis
phylakitikos	...	1
kleros	4	...
pastophorion	...	8
heptarourikos	...	1
unspecified land	6	2

[a]Two of the land types do not appear because of a lacuna and scribal omission.

There are eight parachoreseis extant in the collection of full contracts and subscriptions: six of these ceded katoikic land[2]

1. M. Amelotti, loc. cit. Also Taubenschlag, Law[2] p. 238; but Preisigke WB says that the parachoresis ceded kleroi, p. 269.
2. P Mich. V 252, 259, 262, 267, 273, 303.

and two others ceded sacred land[1] and a vineyard.[2] The vineyard does not seem to belong to any special category so it is difficult to see why a parachoresis was used for the transaction. As for the use of parachoresis for katoikic land, instead of the enchoresis which might be expected, it could not be a question of terminology changing slightly because the katoikic cessions range in date from A.D. 25-6 to A.D. 46.

In the fourth century A.D., there was a precise distinction made between the parachoresis and the enchoresis. The latter was used for the surrender of property to which one did not have proprietary rights and the former, for surrender of property to which one did have proprietary rights.[3] Is it possible that the differentiation of documents in the Tebtunis anagraphai of the first century appears in Karanis three hundred years later?

No direct connection probably exists over such a span of years, but what kind of land is the unspecified land? Did the man who ceded it have title to it? Why did the scribe employ more than usual consistency in designating the nature of the property passed on? There is no solution yet, but the two cessions found among the entries in the Tebtunis anagraphai were used for different purposes. The enchoresis was used to cede police and military allotments, pastophoria, and occasionally unspecified types of land. The parachoresis, on the other hand was the means employed to cede only kleroi and lands

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1. P Mich. V 256.
2. P Mich. V 258.
3. PN.Y.U. 20 (Karanis, A.D. 302), introduction p. 47, note 8.

without a special designation.

There is one additional characteristic of the enchoresis to note. On the second day of Neos Sebastos, A.D. 46 (P Mich. V 238), the enchoresis of a pastophorion was made against a loan for 100 drachmas. The loan was a separate document, entered on the same day on the line below. It is not clear whether this transaction allowed the enchoresis to replace a mortgage in effect.

The number of parachoreseis and enchoreseis is almost equal, fourteen of the former and thirteen of the latter appear in the anagraphe entries.[1] The greatest number of them congregate around the turn of the year A.D. 45-6, in the last quadrimester of A.D. 45-6 and in the first quadrimester of the next year. About half of the cessions are enchoreseis (nine). In comparison with the final quadrimester of A.D. 42, where there are five cessions (four of which are parachoreseis), there is a 44 percent increase over the four year period. Amounts of land appear in seventeen out of the twenty-seven entries for cessions. The average number of arouras per cession, based on the available data is 4.91 arouras.

Summary

The parachoresis and the enchoresis were cessions used by the Tebtunites for different purposes, the former for ceding kleroi and the other unspecified land, the latter for hieratic land, military and police land. The enchoresis was used once in conjunction with

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1. See Table 41.

a loan. There are almost the same number of each of these two types of cessions, which have their highest concentration around the turn of the year A.D. 45-6. The r ise in the numbers of the cessions at this time is not sufficient, however, to make any conclusions about the general economy from these documents alone.

Miscellaneous Contracts: Conclusions

In the process of studying the miscellaneous contracts for their possible value as economic indicators, other useful information became evident. The marriage contracts, for example, appear to have changed in form between the anagraphe of A.D. 42 and where they are predominantly alimentary and dow ry agreements, and the anagraphe of A.D. 45-6, where the titles of the documents took on hybrid forms such as syngraphe phernes instead of homologia phernes. As for the alimentary contracts, the most noticeable characteristic was the notation of the chrysous payment, probably equivalent to the Demotic deben, the divorce penalty. The chrysous payment, in the Tebtunis papyri, appears to have been proportional to the size of the dow ry.

The diairesis, an instrument used for apportionment of inheritance among heirs, and the meriteia, an instrument for the transfer of property from one generation to another, effective either before or after the death of the principals in the agreement, are two other documents which played a small, but interesting part in the lives of some Tebtunites. The meriteia, although found in small numbers, was used to set the proportional allotment of property among the heirs, and to supply the aged parents with some means of support during their

last years. In exchange for a slightly larger share of the patrimony, the oldest son supported his parents either wholly or partially. The meriteia, then, could provide a kind of "retirement" income for the aged who had some resources.

The Tebtunites sold real property, livestock, slaves and machinery. The real property most often sold, according to the anagraphe entries, was a house or part of one; donkeys were the most common animals and looms were the most common machinery sold. The two types of cession, the parachoresis and the enchoresis, were used to transfer land with special designations such as kleroi, sacred land, katoikic land, kleruchic land. The exact reason for using two different documents, and exactly which type of land they each transferred is difficult to determine for sure. Since the Tebtunites differentiated them by name, their usage must have been different too, but the nature of this difference is not yet possible to learn.

Indebtedness

The debtor-creditor relationship is probably one of the oldest human relationships in existence and the cries of hard-pressed debtors for cancellation of debts have always been heard in times of economic pressure. The loan, being nearly universal in its existence, is universally comprehensible in its attendant difficulties to people of both the first century A.D. and the twentieth century A.D. For this reason and the fact that a simple agricultural economy, such as the one in Roman Egypt, would be likely to have its good and bad times reflected in the volume of loans, makes the loan a good economic indicator. In order to discover whether there were hard-pressed debtors crying for relief in Tebtunis during the years A.D. 42 and A.D. 45-6, we must look at the volume of loans for these periods. The difficulty is that loans are not always easy to find.

Hidden loans and antichresis were two of the characteristics of the business life of Tebtunis. Loans could be concealed in leases (the prodomatic lease),[1] service contracts,[2] and connected to cessions.[3] In a loan the use of money or, in some cases, grain was exchanged for the payment of interest as well as the capital. In Egypt the practice of substituting something of equal value for the cash payment of interest was called antichresis. It took the form of exchanging labor, land use, or residence for the interest.

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1. See above, pp. 142-152.
2. See above, pp. 175-217.
3. P Mich. V 238 III, 145.

In some of the prodomatic leases and service contracts the exact nature of the transaction is in question, that is, whether the service or land use involves a loan, the working off of interest, or pre-payment. Two other contracts involve a hidden loan or antichresis. The first, the deposit, presents the familiar difficulty of discovering the nature of the transaction, while the second, the residence agreement, is a sure example of antichresis.

The Deposit

There are two types of deposit. One is characterized by the lack of interest and repayment on demand, the other is actually a loan. The regular deposit was used by a Tebtunite as a method of keeping his valuables, usually money, safe from possible destruction or theft. The depositor would benefit from this arrangement since his valuables would be safe and he could have them back untouched whenever he chose without the application of interest.[1] The hidden loan deposit, called the depositum irregulare, was still to be paid back on demand, but the depositee had the use of the money (or grain or other valuable) without interest. The difficulty for the depositee, who, in this case was the borrower, would be in accumulating an wqual amount of money or whatever was borrowed on possibly short notice. This type of loan must have been used by those Tebtunites who were confident of having the cash on hand or easily available to pay it

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1. P Dura 29, introduction, pp. 149-50. The deposit exists in the modern world in the form of the "Christmas Club" where the depositor deposits his money for safekeeping, receives or pays no interest and, at the proper season, has his money returned. The depositee, the bank, is the chief beneficiary by having the use of the money.

TABLE 47

DEPOSITS AND RESIDENCE CONTRACTS

Month	Deposits		Residence Contracts		QUADRIMESTER TOTALS[a] Deposits (Residence Contracts)	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
Sebastos	4	12	1	5	14 (10)	27 (19)
Phaophi	4	4	1	3		
Neos Sebastos	2	7	4	9		
Choiak	4	4	4	1		
Second Quadrimester	P Mich. 123		P Mich. 123		P Mich. 123	
Tybi	4		4		10 (12)	
Mecheir	3		3			
Phamenoth	3		2			
Pharmouthi	0		3			
Third Quadrimester	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121
Pachon	0	3	3	3	10 (13)	21 (12)
Payni	4	3	2	5		
Epeiph	3	7	5	1		
Kaisareios	3	7	3	2		
Intercalary Days	..	1	..	1		

[a]The quadrimester totals for the residence contracts appear in parentheses.

back. Those people who had trouble scraping together their subsistence could never have taken the risk of being unable to return equal value. The depositee, however, could delay the process by requiring the depositor to establish the fact of the deposit, possibly a time consuming process.[1]

The deposit in Greek is expressed by the single word (παραθήκη) and sometimes (παράθεσις). There is no differentiation of one type of deposit from another in the anagraphai, so again we are faced with the impossible task of finding the hidden loan. What can be found, however, are the distribution and number of deposits.

During the last quadrimester of A.D. 42, twenty-one deposits were drawn up and entered in the anagraphai. The most deposits appear in the months Epeiph and Kaisareios (seven each).[2] During this quadrimester the amount of money per deposit ranged from 16 drachmas to 1,250 drachmas. The average amount for each deposit was 227.3 drachmas, but most of the deposits were under two hundred drachmas.[3]

During the full year A.D. 45-6, a total of thirty-four deposits were entered in the register with the first quadrimester the highest with fourteen entries. During this year the deposits ranged in size from 12 drachmas to 1,800 drachmas. The average amount of drachmas per deposit was 288.0 and most of the deposits involved sums under 100 drachmas.

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1. P Dura 29, pp. 149-50; M. Grund, pp. 257-9.
2. Table 47.
3. Tables 48 and 49.

TABLE 48

DEPOSITS

Reference	Date	Amount In Drachmas	In Artabs
P Mich. II 121 verso			
II, 7	Pachon 16	260	
II, 14	Pachon 18	152	
II, 16	Pachon 18	40	
IV, 20	Payni 21	1,000	
IV, 21	Payni 21	92	
V, 8	Payni 29	60	
V, 11	Epeiph 2	28	
VI, 6	Epeiph 9	48	
VI, 14	Epeiph 12	124	
VI, 16	Epeiph 12	60	
VII, 1	Epeiph 16	260	
VII, 9	Epeiph 19	180	
VII, 19	Epeiph 29	140	
VII, 20	Kaisareios 4	1,250	
IX, 5	Kaisareios 9	100	
IX, 17	Kaisareios 14	250	
X, 7	Kaisareios 16	123	
X, 12	Kaisareios 16	182	
X, 20	Kaisareios 23	16	
XI, 5	Kaisareios 23	360	

TABLE 48 - Continued

DEPOSITS

Reference	Date	Amount In Drachmas	Amount In Artabs
XI, 20-1	Epagomene 1	48	
P Mich. II 123 recto			
II, 6	Sebastos 9	248	
III, 1	Sebastos 23	...	
III, 16	Sebastos 24	1,680	
III, 42	Sebastos 30	212	
IV, 25	Phaophi 5	40	5 barley
V, 9	Phaophi 15	220	
V, 12	Phaophi 16	100	5 wheat
V, 18	Phaophi 18	172	15 wheat
VI, 33	Neos Sebastos 9	60	
VI, 39	Neos Sebastos 10	52	
VIII, 6	Choiak 3	470	
VIII, 16	Choiak 9	132	
VIII, 33	Choiak 17	108	
IX, 25	Choiak 30	502	
IX, 41	Tybi 7	80	
X, 13	Tybi 10	1,800	
X, 18	Tybi 17	220	12-1/2 wheat
X, 37	Tybi 23	406	
XI, 22	Mecheir 2	96	

TABLE 48 - Continued

DEPOSITS

Reference	Date	Amount In Drachmas	Amount In Artabs
XI, 38	Mecheir 5	402	
XII, 8	Mecheir 18	64	
XIII, 16	Phamenoth 23	12	
XIII, 20	Phamenoth 26	48	
XIII, 28	Phamenoth 27	28	
XVII, 1	Payni 7	300	
XVII, 5	Payni 7 - 11	40[a]	
XVII, 29	Payni 18	40	
XVII, 36-7	Payni 23		25 barley
XVIII, 40	Epeiph 17	204	
XIX, 15	Epeiph 25	80	4 wheat
XIX, 16	Epeiph 26	544	
XXI, 43	Kaisareios 2 (?)	...	
XXII, 20	Kaisareios 28	...	
XXII, 24	Kaisareios 28	280	
P Mich. V 238			
I, 16	Sebastos 9	460	
I, 44	Sebastos 25	200	5 wheat 5 barley
II, 53	Sebastos 26	100	6-1/2 wheat
II, 58-9	Sebastos 26	80	2 wheat 6 barley
II, 65	Sebastos 28	84	

TABLE 48 - Continued

DEPOSITS

Reference	Date	Amount In Drachmas	In Artabs
II, 68	Sebastos 28	7	3 wheat
II, 70	Sebastos 28	212	6-1/2 wheat
II, 73	Sebastos 29	120	15 barley
II, 74	Sebastos 29	580	
II, 78	Sebastos 30	56	
II, 82	Sebastos 30	40	3 wheat
II, 83	Sebastos 30	20	4 barley
II, 94	Phaophi 2	2,040	
II, 98	Phaophi 3	100	5 wheat
II, 105	Phaophi 5	7	4 wheat
II, 134	Phaophi 13	100	7 wheat
III, 161-2	Neos Sebastos 7	200	2 wheat
IV, 174	Neos Sebastos 16	120	
IV, 178	Neos Sebastos 18	84	
IV, 184	Neos Sebastos 20	52	
IV, 190	Neos Sebastos 24	88	4 wheat
IV, 200	Neos Sebastos 28	28	
V, 233	Choiak 19	300	
V, 234	Choiak 19	1,000	
V, 240	Choiak 23	24	4 wheat
V, 241	Choiak 25	72	5-1/2 wheat
V, 246	Choiak 29	60	3-1/2 wheat

[a]This deposit is connected to a lease of a house.

After the new year, during the first quadrimester of A.D. 46-7, there were twenty-eight deposits made in Tebtunis, most of which were entered during the first month, Sebastos. The deposits ranged from 7 to 2,040 drachmas, although the greater number of the deposits (seventeen out of twenty-eight) were under 100 drachmas. The average amount of each deposit during these four months was 231.4. Table 46 summarizes this data.

A.D. 45-6 seems to have been a low year for deposits, at least in comparison with the two other extant anagraphai. The whole year was only eighteen percent higher in deposit volume than the first quadrimester of the succeeding year. There is a great contrast between the final quadrimester of A.D. 42 and that of A.D. 45-6 as well. In the earlier period, there were twenty-one deposits and in the later period there were only ten.[1] For some reason fewer deposits were made during A.D. 45-6. A possible explanation for this low volume might be that there was a pattern of distribution for these contracts which peaked at the beginning of the following year, or, if the deposits were actually loans, then people made the deposits after they saw the condition of the flood for that year.

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1. Table 47.

TABLE 49

DATA ON AVERAGES FOR THE DEPOSITS

Anagraphe	No. of Deposits[a]	Range in Drachmas	Arithmetic[b] Average	Modal[c] Average	% of Entries[d] within Mod.Int.
P Mich. 121	21	16 - 1250	227.3	1 - 200	71
P Mich. 123	30	12 - 1800	288.0	1 - 100	28
P Mich. 238	27	7 - 2040	231.4	1 - 100	61

[a]Deposits which have an amount listed.

[b]Given in drachmas.

[c]The dispersion does not admit of a real mode, but a modal interval may be chosen.

[d]This column gives the percentage of the total deposits which are within the spread of the modal interval.

The smaller number of deposits during the year A.D. 45-6 could also be attributed to a shortage of cash in the chora. In the event of a bad flood, the peasants would have little surplus grain or money after taxes in kind and money were paid to the state. The peasant would need more money to buy whatever foodstuffs, particularly wheat, that he did not produce himself, because the price of wheat would rise with the scarcity.[1] The peasant, then, whose disposable income was usually limited, would find himself even more limited in the amount of money that he had to spend or save. This situation would account for fewer "regular" deposits where the money was turned over to another party for "safekeeping." Nor would this

1. The price rise in A.D. 45-6 is seen in Kronion's personal accounts, P Mich. II 127.

"lower class" group of debtors be more likely to use the depositum irregulare in place of one of the other loan types where the capital did not have to be quickly and unexpectedly accumulated and returned. Even though most of the deposits were made for sums under 100 drachmas, this does not mean that it could not be as difficult for some Tebtunites to amass 40 drachmas as others to amass 1,000 drachmas. In addition, inability to repay on demand doubled the amount to be returned.[1]

While the foregoing was true for the Egyptian peasant of marginal subsistence to whom 100 drachmas represented a small fortune, there were other "middle class" Tebtunites whose economic level was far above this. This middle class would be the group more likely to use the deposit since, in any economic situation, good or bad, they could call upon resources unavailable to the marginal people. The middle class would have the money to deposit for "safekeeping" and they might borrow some of the large amounts found among the anagraphai[2] deposits for short term investments, like speculation in grain in a time of dearth. However, the non-marginal group would be more likely to act as depositors than depositees in a loan-making situation, because they had the cash. The depositor could perhaps hope for a double return in case of default on the part of the depositee, which would make this a risky way to double his investment. The depositee, on the other hand, would have had to weigh the advantage of paying

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1. P Dura 29, introduction, p. 150.
2. As in P Mich. II 121, IV, 20 (1,000 dr.); VII, 20 (1,250 dr.); II 123, III, 16 (1,680 dr.); X, 13 (1,800 dr.); V, 238, II, 94 (2,040 dr.); V, 234 (1,000 dr.).

no interest against the disadvantage of payment on demand. Since there are many deposits, many of which must be loans, some depositees must have considered the risk worth taking, especially if they used the delaying tactics of forcing the depositor to prove that the deposit was actually made.[1]

The abstracts to the documents listed in P Mich. II 121 are not very helpful in clarifying the way to differentiate the deposit from the depositum irregulare or to tell what the reasons behind the deposits could be. There are five abstracts for deposits in the eiromenon.[2] Of these, four provide barely any information at all beyond the names of the parties and the amount of the deposit. No reason is given in these four abstracts for the deposits. However, all of the recipients or depositees are said to be "Persians of the epigone," the status designation of the debtor.[3] The fifth abstract concerns a deposit of 52 silver drachmas between Didymos, son of Telesis (the depositor) and Petheus, son of Petheus, Persian of the epigone,[4] who both acted as lessor and lessee respectively in the lease of a granary in the previous abstract.[5] In the granary lease, Petheus was to pay rent of 50 artabs of new barley in Neos Sebastos,

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1. P Dura 29, introduction, p. 149, note 3.
2. P Mich. II 121 recto, II, iii, x; III, ii, vi.
3. J.G. Tait, "Πέρσης τῆς ἐπιγονῆς," Archiv 7 (1924), pp. 175-182; F. Pringsheim, "Die Rechsstellung der Πέρσης τῆς ἐπιγονῆς," ZSSRA 44(1924), pp. 396-526.
4. P Mich. II 121 recto, III, vi.
5. P Mich. II 121 recto, III, v.

and additional presents of two cocks worth 4 drachmas and 1 artab of barley at the Amesyia Festival. There does not appear to be any connection between the two agreements, aside from the identity of the participants. One explanation behind Petheus' deposit is that he needed money to begin operating the granary and sought this capital from his landlord, Didymos. In such circumstances, the deposit would be a loan and this would explain Petheus' status as a Persian in the deposit abstract.[1]

The Tebtunites deposited money exclusively in A.D. 42,[2] but in A.D. 45-6 they also deposited grain, both wheat and barley. Money and grain amounts appear in 15 percent (five out of thirty-four) of the deposit entries for A.D. 45-6. One[3] is a deposit of grain alone. At the beginning of the next year, 61 percent (seventeen out of twenty-eight) of the entries include both an amount of money and an amount of grain. One further deposit of 40 drachmas[4] is connected to the lease of a house. Table 50 lists the deposits which involved both grain and money.

Most of the grain deposits are in wheat; 70 percent of grain deposits are for amounts of 5 artabs and less. Money deposits are made for 100 drachmas or less in 73 percent of the entries. On first glance there seems to be a correlation between the amount of money and amount of grain, that is, a deposit of 7 drachmas has only 3 or 4

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1. P Mich. II 123 recto XVII, 56 preserves the record of another lease/deposit combination.
2. Table 50.
3. P Mich. II 123 XVII, 36-7.
4. P Mich. II 123 XVII, 5.

artabs with it and some large money deposits of 120 drachmas, for example, have large amounts of grain, 15 artabs, with them. However, there is also a deposit of 200 drachmas with only 2 artabs of grain, so the correlation does not hold.

TABLE 50

DEPOSITS WHICH LIST BOTH MONEY AND GRAIN

Reference	Amount of Money in Drachmas	Amount of Grain in Artabs	Grain Type
P Mich. 123			
IV, 25	40	5	barley
V, 12	100	5	wheat
V, 18	172	15	wheat
X, 18	220	12-1/2	wheat
XIX, 15	80	4	wheat
P Mich. 238			
I, 44	200	5 5	wheat barley
II, 53	100	6-1/2	wheat
II, 58-9	80	2 6	wheat barley
II, 68	7	3	wheat
II, 70	212	6-1/2	wheat
II, 73	120	15	barley
II, 82	40	3	wheat
II, 83	20	4	barley
II, 98	100	5	wheat

TABLE 50 - Continued

DEPOSITS WHICH LIST BOTH MONEY AND GRAIN

Reference	Amount of Money in Drachmas	Amount of Grain in Artabs	Grain Type
II, 105	7	4	wheat
II, 134	100	7	wheat
II, 161-2	200	2	wheat
IV, 190	88	4	wheat
V, 240	24	4	wheat
V, 241	72	5-1/2	wheat
V, 246	60	3-1/2	wheat

These money/grain combination deposits do look like loans. Every Egyptian needed both money and grain to pay his myriad taxes. Taxes in kind, however, were usually paid at harvest time, during the months Pharmouthi-Epeiph depending on location.[1] Most of these deposits come during the first months of the year, much later than the harvest. If there had been a bad flood, the tax assessments would probably have been lowered on the affected lands,[2] but some people may still have had difficulty in paying all their taxes at the proper time. Then these tax delinquents would have to pay the taxes in arrears as well as a fine.[3] While connections of these deposits to tax payments is largely conjectural, it is just possible that the

1. Wallace, Taxation in Egypt, p. 33.
2. Wallace, Taxation in Egypt, p. 32.
3. Ibid., p. 37.

grain amounts were for the personal use of the depositees.

Antichresis of Residence

Unlike the deposits which could be used as loans, but often were not, the homologiai enoikeseos (ὁμολογία ἐνοικήσεως), also called the homologiai enoikeseos kai daneion (ὁμολογία ἐνοικήσεως καὶ δανειον), were always connected to a loan. These contracts provided for the residence of the creditor in lodging supplied by the debtor in lieu of payment of interest on the loan. However, residence was all that these contracts supplied unless further legal concessions were made by the debtor. Otherwise, the right of habitation did not also constitute a mortgage or give the creditor the right of execution in the event of the debtor's inability to repay the loan.[1]

There are sixty-seven residence contracts in the three registers. The year A.D. 45-6 has thirty-five of them, the final quadrimesters of A.D. 42 has twelve and the beginning of A.D. 46-7 has twenty of them.[2] The average number of residence entries for A.D. 45-6 is 11.6 per quadrimester. In comparison, A.D. 42 is above the average by .03 percent, while the first quadrimester of A.D. 46-7 is above the average by 72 percent. This quadrimester is twice as high in volume for these residence contracts as the same period in the preceeding year. More Tebtunites were providing residence for their creditors in A.D. 46 than in previous years.

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1. P Mich. Browne, 585, introduction, p. 33.
2. See Table 47.

Every entry[1] for a residence contract notes a sum of money. The sums range from 12 drachmas to 456 drachmas. In A.D. 42, the average amount of money per residence contract and loan was 56.7 drachmas. The mode is 40 drachmas. In A.D. 45-6, the average amount per residence and loan went up. It was now 98.2 drachmas and the mode was 40 drachmas again. At the beginning of the next year, the average amount of money for each loan and residence was 105.7 drachmas and in this quadrimester the mode was 100 drachmas. The amounts given in the register entries cannot indicate the amount of interest which was paid off with the habitation rights. The amounts must be the principals of the loans because at the usual interest of 12 percent per year a sum of 144 drachmas would be the interest on a 1200 drachma loan; 456 drachmas would be the interest on a 3,800 drachma loan. Sums as large as 3,800 drachmas are never found in the registers and sums of 1,200 drachmas are rare. It seems as if the Tebtunites were not only making more loan/residence agreements but larger ones too. Table 51 summarizes the averages for residence contracts.

There are only three abstracts related to the homologia enoikeseos in the eiromenon.[2] One is a receipt of 60 drachmas, according to a contract for residence.[3] The second abstract which

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1. See Table 52. Due to a break in the text a few entries do not have an amount of money noted. These are: P Mich. II 121, X, 13; 123, X, 2; XXI, 50; XXII, 9. P Mich. V 238, III, 143 has the loan of a pottery stone instead of money.
2. P Mich. II 121 recto III, ix; IV, ix, xi.
3. P Mich. II 121 recto III, ix.

records the residence agreement of Klesis and his wife Arsinoe with Papos, son of Didmos.[1] In exchange for remission of interest on their loan from Papos of 40 drachmas, Klesis and Arsinoe agreed to furnish lodging for Papos. In addition, they agree to stable Papos' asses in their courtyard and allow him to use all the equipment in the yard. This is an example of a contract which specifically mentions a grant of privileges beyond the basic lodging: the stabling of asses. The creditor, Papos, was to have this right of inhabitation for two years.

TABLE 51

DATA ON AVERAGES FOR RESIDENCE CONTRACTS

Anagraphe	Number of Residences	Range in Drachmas	Arithmetic[a] Average	Modal[a] Average	% of Entries within Mod. Av.
P Mich. 121	12	7-128	52.6	40	33.3
P Mich. 123	32	12-372	98.2	40	4.6
P Mich. 238	18	24-456	108.2	100	42.1

[a]Given in drachmas. All averages based on the number of entries with notations of amounts.

Leon, son of Onnophris in the third residence abstract,[2] received a loan from Pallaus, son of Horoyanchis, of 28 silver drachmas and in exchange granted him habitation rights in one-half of his house and courtyard for one year. One further point in this abstract is the fact that Leon "will give lodging to Pallaus and those whom

1. P Mich. II 121 recto IV, ix.
2. P Mich. II 121 recto IV, xi.

TABLE 52

RESIDENCE CONTRACTS

Reference	Date	Amount of Loan[a]	Loan Reference[b]
P Mich. II 121 Verso			
I, 8	Pachon 5	40	...
I, 12	Pachon 5	20	...
III, 15	Pachon 28	40	...
III, 17	Payni 1	28	...
III, 20	Payni 4	60	...
III, 21	Payni 4	60	...
IV, 4	Payni 7	40	...
V, 9	Payni 29	100	...
V, 15	Epeiph 4	128	V, 16
X, 13	Kaisareios 19	7 (?)	...
XI, 10	Kaisareios 25	48	...
XII, 17	Epagomene 5	60	...
P Mich. II 123 recto			
II, 42	Sebastos 19	24	II, 43
V, 33	Epeiph 21	140	...
VI, 29	Neos Sebastos 9	120	VI, 29
VII, 20-21	Neos Sebastos 19	80	VII, 20-21
VII, 37-9	Neos Sebastos 25	120	VII, 37-39
VII, 41	Neos Sebastos 27	100	VII, 41
VIII, 4	Choiak 3	120	...
VIII, 11	Choiak 7	80	...

TABLE 52 - Continued

RESIDENCE CONTRACTS

Reference	Date	Amount of Loan[a]	Loan Reference[b]
VIII, 19	Choiak 11	32	...
VIII, 38	Choiak 22	48	...
X, 2	Tybi 7	..	...
X, 33	Tybi 22	40	...
X, 35	Tybi 23	28	...
X, 36	Tybi 23	12	...
XI, 23	Mecheir 2	46	...
XI, 37	Mecheir 5	104	...
XII, 9	Mecheir 18	156	...
XII, 44	Phamenoth 4	48	...
XII, 45-6	Phamenoth 4	28	...
XIII, 36	Pharmouthi 1	52	...
XIV, 19	Pharmouthi 12	120	...
XV, 9	Pharmouthi 30	240	...
XV, 21	Pachon 9	20	...
XV, 35	Pachon 15	40	...
XVI, 2	Pachon 19 - 26	40	...
XVII, 15	Payni 14	340	...
XVII, 21-22	Payni 18	124	XVII, 23
XVIII, 16	Epeiph 6	12[c]	...
XVIII, 18-19	Epeiph 6	80	XVIII, 18-19 1/3 of House

TABLE 52 - Continued

RESIDENCE CONTRACTS

Reference	Date	Amount of Loan[a]	Loan Reference[b]
XVIII, 29	Epeiph 11	29	...
XIX, 19-20	Epeiph 27	372	XIX, 19-20
XIX, 23	Epeiph 28	46	...
XXI, 27	Kaisareios 9	300	...
XXI, 50	Kaisareios 24	..	...
XXII, 9	Kaisareios 24-8	..	XXII, 9
P Mich. V 238			
I, 12	Sebastos 5	200	I, 13
I, 46	Sebastos 25	20	...
II, 60	Sebastos 26	156	...
II, 71	Sebastos 28	28	...
II, 85	Sebastos 30	100	...
II, 106	Phaophi 5	24	...
III, 108	Phaophi 5	100	III, 109
III, 117	Phaophi 7	100	...
III, 143	Neos Sebastos 2	Pottery Stone[d]	...
III, 160	Neos Sebastos 6	120	...
IV, 163	Neos Sebastos 9	28	...
IV, 170	Neos Sebastos 12	28	...
IV, 171	Neos Sebastos 12	200	...
IV, 172	Neos Sebastos 14	100	...
IV, 180	Neos Sebastos 19	24	...

TABLE 52 - Continued

RESIDENCE CONTRACTS

Reference	Date	Amount of Loan[a]	Loan Reference[b]
IV, 185	Neos Sebastos 21	40	...
IV, 206	Neos Sebastos 30	124	...
IV, 210	Choiak 4	456	IV, 211
IV, 213	Choiak 4	100	...

[a]The amount is in drachmas or silver drachmas.

[b]While a residence contract presupposes the existence of a loan, sometimes the loan is entered as a separate document on the same line or the next.

[c]It is uncertain whether these 12 drachmas represent the amount of the loan or the amount of the grammatikon.

[d]This is an agreement to furnish residence in return for a loan of a stone used in manufacture of pottery.

he may wish..."[1] The creditor did not necessarily have to make use of the right of residence himself but could delegate a relative or perhaps a non-relative to use these rights in his place.

Mortgages

The Tebtunites made two types of mortgage: the hypotheke (ὑποθήκη) and the mesiteia (μεσιτεία). The former was used for mortgaging both land and slaves, the latter for mortgaging katoikic land.[2] There are relatively few of these loans on security in the Tebtunis registers. There are none at all in the last quadrimester of A.D. 42 and four each in the first two quadrimesters of A.D. 45-6. In the last quadrimester of that year there are only two and immediately following, in the first quadrimester of A.D. 46, four more.[3] About one-third (five out of fourteen) of the mortgage entries are mesiteiai.

All the mortgages, except for one,[4] list the amount of the loan and/or the property mortgaged. Four of the entries list both land and amounts of money: 4 arouras for 500 drachmas; 3-1/2 arouras for 400 drachmas; 2 arouras (of a kleros) for 220 drachmas; 6 arouras (of a kleros) for 832 drachmas. The first mortgage gave the debtor 125 drachmas per aroura; the second 114.3 drachmas per aroura; the third 110 drachmas per aroura and the fourth 138.7 drachmas per aroura. The average amount of money borrowed with land as collateral, then

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1. P Mich. II pp. 78-9.
2. Preisigke, Fachwoerter, s.v.
3. See Table 52.
4. P Mich. II 121, VIII, 44.

was 122 drachmas per aroura. Other hypothecated property is not so easy to evaluate. Some of the entries note the amount of land, but not the money, while other entries note the money and not the land. Shares of houses are also mortgaged and in one case it is a slave.

There are four examples of hypothekai in the Michigan collection.[1] Each of them has been drawn up in the form usual for mortgages which is called ὠναὶ ἐνπίστει . This two-fold document consists of the πρᾶσις (sale) and the δάνειον (loan). The idea behind this two-part transaction was that the debtor "sold" his security to the creditor in the first document in exchange for a loan which he acknowledged in the second document. Although the anagraphe entries display a variety of things used as collateral, land, slaves, houses, the extant mortgages were made exclusively on houses or parts of houses. The amounts borrowed ranged from 48 to 420 drachmas with an interest rate of "1 drachma per mina (100 drachmas) per month," or 12 percent. At the end of a year, the length of each of these four mortgages, the principal and the interest was to be returned to the creditor. The loan for 420 drachmas, for example, at 12 percent would have yielded 50 drachmas in interest. If, however, the debtor could not repay his 48 or 420 drachmas, then there was another document available to remedy his plight.

Closely connected to the mortgage was the act of foreclosure executed through the homologia ekstaseos (ὁμολογία ἐκστάσεως), a formal and probably voluntary declaration of the debtor that he has

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1. P Mich. V 328 (A.D. 29), 329-30 (A.D. 40), 332 (A.D. 48), 335 (A.D. 56).

TABLE 53

LOANS AND MORTGAGES

Month	Loans		Mortgages[a]		QUADRIMESTER TOTALS	
First Quadrimester	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238	P Mich. 123	P Mich. 238
Sebastos	4	14	1	4	27	43
Phaophi	8	6	1	0		
Neos Sebastos	9	10	0	0		
Choiak	2	9	2	0		
Second Quadrimester	P Mich. 123		P Mich. 123		P Mich. 123	
Tybi	7		3		23	
Mecheir	4		0			
Phamenoth	0		0			
Pharmouthi	8		1			
Third Quadrimester	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121	P Mich. 123	P Mich. 121
Pachon	4	3	1	0	34	27
Payni	11	8	1	0		
Epeiph	6	6	0	0		
Kaisareios	11	8	0	0		
Intercalary Days	..	2	..	0		

[a]These include both *hypothekai* and *mesiteiai*.

ceded his property to his creditor because he is unable to pay his debt.[1] Very few of these documents are found in either the registers or in the collection of subscriptions and complete documents. In the register of A.D. 42, there are only two homologiai ekstaseos listed.[2] In A.D. 45-6, there are only three for that whole year[3] and three more in the first quadrimester of the next year.[4] Among the fuller documents, there is one example of a formal renunciation in P Mich. V 232 (A.D. 36) where the defaulting debtors, the widow and minor sons of Galates, son of Lysimachos, and the brothers of Galates, petitioned the creditors to accept a homologia ekstaseos kai eudokesis along with a payment of 2,500 drachmas in return for a release from all obligations, especially the taxes. This document is dated to A.D. 36. Since there are so few of these cessions of property in the registers, times were not yet so difficult that mortgages made earlier could not be repaid, but whether the loans and mortgages made during A.D. 45-6 were repaid is not known.

Loans

The daneion (δάνειον), unlike some of the other forms of indebtedness, is exactly what it is called, a loan. A daneion could be made either in money or kind, with the former predominant in the registers of Tebtunis. Repayment of the loan was made on a date fixed at the time of the agreement but payment in kind was usually

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1. P Dura 17A, introduction, pp. 96-7.
2. P Mich. II 121 verso VIII, 4; XII, 10.
3. P Mich. II 123 recto II, 25; XII, 20; XIV, 23.
4. P Mich. V 238, I, 36; II, 92, 96.

TABLE 54

MORTGAGES

Reference	Type	Date	Amount/Object Mortgaged
P Mich. II 123 recto			
II, 39	1[a]	Sebastos 18	4 ar./500 dr.
V, 23-4	1	Phaophi 20	3-1/2 ar./400 dr.
VIII, 27	2	Choiak 14	100 dr.
VIII, 44	..	Choiak 27	....
IX, 32	2	Tybi 2	half share of house
IX, 36-7	2	Tybi 4	share of house/124 dr.
X, 26	2	Tybi 19	140 dr.
XV, 2	2	Pharmouthi 25	20 dr.
XV, 20	2	Pachon 7	house + court/140 dr.
XVII, 43-4	1	Payni 2 (?)	2 ar. kleros/220 dr.
P Mich. V 238			
I, 3[b]	1	Sebastos 2	2 ar./308 dr.
I, 8[b]	2	Sebastos 5	share of house/100 dr.
I, 17[b]	1	Sebastos 9	6 ar. kleros/832 dr.
I, 30[b]	2	Sebastos 16	slave/100 dr.

[a]The code for the mortgage type is: 1 = mesiteia; 2 = hypotheke.

[b]This mortgage is connected to a separate loan.

made at harvest time. Repayment on both money and grain loans could be made in installments.[1] While it was possible to borrow without interest (through a deposit, for example), most creditors charged interest. The rate of interest during the first century A.D. was one percent per month or twelve percent a year and the total interest paid could not exceed the amount of the principal loaned.[2]

There are 140 loans registered in the three anagraphai.[3] In the final quadrimester of A.D. 42 twenty-seven loans were made and entered. The first two quadrimesters of A.D. 45-6 show a comparable volume of twenty-three and nineteen entries respectively. The volume of loans rises during the next two quadrimesters, the last of A.D. 45-6 and the first of A.D. 46-7, when the total number of loans entered in the registers was thirty-two and thirty-nine respectively. If we compare the first quadrimester of A.D. 45-6 with the first quadrimester of A.D. 46, we see that there is a 69.5 percent increase in the volume of loans. A smaller increase in volume between the last quadrimester of A.D. 42 and the final months of A.D. 45-6 is evident, just 18.5 percent.

In A.D. 42[4] the loans ranged from 16 drachmas to 600 drachmas. The average size for a loan at that time was 123.3 drachmas per loan, but 50 percent of the loans were made for amounts under 100 drachmas.

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1. Taubenschlag, Law[2], pp. 341-344.
2. Ibid. Cf. A. Segrè, "Il mutuo e il tasso d'interesse nell' Egitto greco-romano," Atene e Roma 5 (1924), p. 123.
3. Table 53.
4. Table 55.

In the year A.D. 45-6 the average amount per loan was higher, 152.9 drachmas per loan. The amounts ranged from 16 drachmas to 540 drachmas and the modal amount within this range was 120 drachmas. In the first quadrimester of the next year, the amount of the loans were higher still, averaging 174 drachmas per loan in a range of 22 drachmas to 832 drachmas. The modal average was 100 drachmas; 33.3 percent of the loans were made for 100 drachmas. Table 55 summarizes these averages

TABLE 55

DATA ON AVERAGES FOR THE LOANS

Anagraphe	No. of Loans[a]	Range in Drachmas	Arithmetic Average[b]	Modal Average	% of Entries in Modal Av.
P Mich. 121	27	16 - 600	123.3	1 - 100[c]	50
P Mich. 123	57	16 - 540	152.9	120	21
P Mich. 238	39	22 - 832	174.0	100	33.3

[a]Only those loans with a notation of the amount of the loan are considered.

[b]In drachmas.

[c]A true mode cannot be found in this distribution, so a modal interval has been chosen.

There is one abstract of a loan in the eiromenon and three other loans in the Michigan collection. The abstract[1] preserves the loan of 16 drachmas made by Haryotes, son of Lysimachos, to Phasis, son of Peteno ( ). Phasis was to repay the loan, apparently without

1. P Mich. II 121 recto III, iv.

interest, within three months (in Kaisareios). These same men entered into a paramone contract which appears in the abstract immediately before the loan.[1] In the service contract, Phasis was to receive 100 drachmas and in place of the interest and the 1-1/2 artabs which Phasis was to receive per month, he was to receive an allowance of grain and the shearings of four sheep annually. Haryotes was also supposed to pay Phasis' poll tax. Evidently there was no connection between the two contracts except for the identity of the participants.

The two other loans[2] involve interesting people and features. In A.D. 27, Galates, son of Lysimachos, lent 450 drachmas to Orseus, son of Haryotes.[3] The interest was 1 drachma, 3 obols per mina per month.[4] This works out to an interest rate of 18 percent a year. The usual interest rate was 12 percent a year. The interest payment in a year on 450 drachmas would be 81 drachmas. Galates was the oldest brother in the large family of Lysimachos, son of Didymos which produced a kommogrammateus in the early first century A.D.[5] Two of his brothers married into the family of Herakleides the Younger, son

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1. P Mich. II 121 recto III, iii.
2. The third loan, P Mich. V 331, is incomplete.
3. P Mich. V 336.
4. There are few loans of 18 percent; Cf. Johnson, Roman Egypt, pp. 450-452, especially 450, note 58. With the interest rate at 1 dr. 3 obols, they were probably working on a basis of a six-obol drachma. Sometimes, however, a seven-obol drachma was used in accounts; cf. P Mich. II 123 verso and V. Schuman, "The seven-obol drachma of Roman Egypt," CP 47 (1952), pp. 214-218.
5. P Mich. V, introduction, pp. 14-22 and above Chapter I, pp. 30-59

of Maron: Lysimachos married Arsinoe, the daughter of Herakleides, and Haryotes married, Herakleia, daughter of Didymos, brother of of Herakleides the Younger.[1] Galates'brother, Haryotes, was the same Haryotes who employed Phasis, son of Peteno ( ) and also lent him 16 drachmas in A.D. 42.

At some time between A.D. 27, the date of this loan, and A.D. 36, Galates died leaving behind his widow, Taorses, and three minor sons, Lysas, Lysimachos and Eutychos. Galates and his three brothers had mortgaged their 82 arouras of katoikic land to Kastor and his brother Lysimachos for two talents and 1,200 drachmas. Galates and his brothers had defaulted, leaving his widow and minor sons liable for the taxes and public charges. Taorses' kyrios was her kinsman, Ptolemaios, son of Chairemon, the aged professional scribe who wrote so many documents during the last quadrimester of A.D. 42.[2]

Galates, son of Lysimachos, was a creditor who belonged to a family wealthy enough for one of its members to fill the liturgical post of komogrammateus, and Greek enough to marry into the family of Herakleides the Younger, whose descendants were among the "6,475 Hellenes in the Arsinoite nome," in the second century A.D. Despite these advantages, Galates and his brothers managed to default on their mortgage of 82 arouras, a considerable amount of land as land plots go in the Tebtunis papyri.

The other creditor was Horion, son of Kronion, who lent 450

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1. P Mich. V p. 17, Table I.
2. P Mich. V 232. For Ptolemaios see Chapter I,

drachmas to Herakleides, son of Ischyrion, and his mother, Thaubarion.[1] The loan was made for 760 drachmas, at the usual rate of interest. At the end of the year Herakleides was to have returned the 760 drachmas and 91 more as interest, unless he defaulted, in which case he would have to pay Horion 1,140 drachmas plus interest. The penalty on a default was half the amount of the loan. The debtors, Herakleides and his mother, had already mortgaged some property, a katoikic allotment of 3-3/4 arouras near Theogonis, to Horion and they were not to repay the mortgage until they had repaid the loan. The reasoning behind this was the mortgage had collateral, but the loan did not and should, therefore, be paid first. It is interesting to note that some of these creditors appear in more than one transaction and probably used the loan as an investment.[2]

Summary

To some Tebtunites the loan was an investment, while to others it was a great burden. Some loans, in the form of a deposit, were given without interest, but on condition that the money (or whatever had been deposited) would be returned on demand. Another type of loan was made with the stipulation that the creditor or someone he chose would live in lodgings supplied by the debtor, in place of interest. The mortgage, on the other hand, had interest as well as collateral in the form of real property or a slave. The loan seems to have been one of the few straight-forward deals of its kind. It involved an

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1. P Mich. V 333-4.
2. Johnson, Roman Egypt, p. 451.

interest rate of 12 percent and heavy penalties for default. However, unlike related indebtedness such as the prodomatic lease or the prepaid paramone contracts, the daneion was not hidden within other agreements.

Generally, there are more loans, residence contracts, and deposits in the first quadrimester of A.D. 46 than in the preceding year. The only contract which remains stable is the mortgage, which is not found in great abundance anyway. If the loan is an economic indicator, then what does a rise in the loan volume of 59 percent mean to the economy of Tebtunis?

TABLE 56

LOANS

Reference	Date	Amount in Drachmas	Connection to Other Contract
P Mich. II 121 verso			
I, 17	Pachon 5	68	....
I, 19	Pachon 9	136	nursing
II, 18	Pachon 18	16	....
III, 19	Payni 3	48	....
IV, 5	Payni 11	224	....
IV, 8	Payni 16	600	....
IV, 16	Payni 18	48	....
IV, 22	Payni 22	44	....
V, 1	Payni 25	56	....
V, 3	Payni 26	240	....
V, 5	Payni 26	44	....
V, 16	Epeiph 4	128	residence
V, 19	Epeiph 7	72	....
V, 20	Epeiph 7	60	....
VI, 10	Epeiph 10	44	....
VI, 22	Epeiph 14	120	nursing
VII, 14	Epeiph 24	40 5 art. wheat	....
IX, 6	Kaisareios 9	50	....
IX, 16	Kaisareios 14	140	....

TABLE 56 - Continued

LOANS

Reference	Date	Amount in Drachmas	Connection to Other Contract
IX, 19	Kaisareios 16	124	....
X, 4	Kaisareios 16	320	....
X, 15	Kaisareios 19	90	....
X, 19	Kaisareios 23	160	....
XI, 1	Kaisareios 23	224	....
XI, 9	Kaisareios 25	24	....
XII, 9	Epagomene 5	132	nursing
XII, 12	Epagomene 5	100	....
P Mich. II 123 recto			
II, 43	Sebastos 19	24	....
II, 47	Sebastos 21	52	....
III, 21	Sebastos 25	148	....
III, 33	Sebastos 28	80	nursing
IV, 2	Phaophi 2	100	....
IV, 12	Phaophi 4	28	....
IV, 14	Phaophi 4	500	....
IV, 19	Phaophi 5	100	nursing
IV, 31	Phaophi 8	28	....
V, 2	Phaophi 13	407	....
V, 8	Phaophi 15	248	....
V, 40	Phaophi 24	...	....
VI, 22	Neos Sebastos 6	...	nursing
VI, 23	Neos Sebastos 6	...	nursing

TABLE 56 - Continued

LOANS

Reference	Date	Amount in Drachmas	Connection to Other Contract
VI, 29	Neos Sebastos 9	120	residence
VI, 35	Neos Sebastos 9	60	....
VII, 7-8	Neos Sebastos 9	110	nursing
VII, 20-21	Neos Sebastos 19	80	residence
VII, 37-38	Neos Sebastos 25	120	residence
VII, 41	Neos Sebastos 27	100	residence
VII, 47	Neos Sebastos 29	120	nursing
VIII, 25	Choiak 14	540 38-1/2 art. wheat	....
VIII, 28	Choiak 16	60	....
IX, 30	Tybi 2	28	....
IX, 33	Tybi 2	316	....
X, 3-4	Tybi 7	120	nursing
X, 10	Tybi 10	124	nursing
X, 16	Tybi 16	380	....
X, 24	Tybi 19	100	nursing
X, 34	Tybi 23	24	....
XI, 34	Mecheir 4	88	....
XII, 6	Mecheir 16	...	....
XII, 13	Mecheir 19	16	....
XII, 23	Mecheir 25	48	....
XIII, 35	Pharmouthi 1	120	nursing
XIII, 38	Pharmouthi 1	120	nursing

TABLE 56

LOANS

Reference	Date	Amount in Drachmas	Connection To Other Contract
XIII, 41	Pharmouthi 5	120	nursing
XIV, 16	Pharmouthi 10	228	....
XIV, 18	Pharmouthi 12	120	....
XIV, 33	Pharmouthi 17	120	nursing
XIV, 46	Pharmouthi 23	...	....
XV, 8	Pharmouthi 30	...	nursing
XV, 15	Pachon 5	156	....
XV, 25	Pachon 12	48	....
XV, 28	Pachon 13	120	....
XV, 31	Pachon 14	160	....
XVI, 19	Payni 2	100	....
XVI, 21	Payni 2	500	receipt
XVI, 26	Payni 3	100	....
XVI, 29	Payni 4	140	nursing
XVI, 31	Payni 5	124	....
XVII, 13	Payni 14	28	....
XVII, 18	Payni 17	280	....
XVII, 23	Payni 18	124	residence
XVII, 28	Payni 18	112	....
XVII, 32-3	Payni 18	...	nursing
XVII, 42	Payni 2 (?)	240	....
XVIII, 11	Epeiph 2	16	....
XVIII, 18-19	Epeiph 6	80	residence

TABLE 56 - Continued

LOANS

Reference	Date	Amount in Drachmas	Connection To Other Contract
XVIII, 24	Epeiph 8	320	....
XVIII, 26	Epeiph 9	...	nursing
XIX, 5	Epeiph 22	232	....
XIX, 19-20	Epeiph 27	372	residence
XX, 32	Kaisareios 6	...	....
XXI, 22	Kaisareios 6-9	180	....
XXI, 28	Kaisareios 9	112	....
XXI, 44	Kaisareios 1 (?)	...	....
XXI, 47	Kaisareios 23	...	....
XXI, 49	Kaisareios 23	...	....
XXI, 51	Kaisareios 24	...	....
XXII, 9	Kaisareios 24-8	...	residence
XXII, 12	Kaisareios 24-8	54	....
XXII, 19	Kaisareios 28	...	nursing
XXII, 34	Kaisareios 30	...	....
P Mich. V 238			
I, 4	Sebastos 2	308	....
I, 9	Sebastos 5	100	....
I, 13	Sebastos 5	200	residence
I, 18	Sebastos 9	832	mortgage
I, 25	Sebastos 14	100	....
I, 28	Sebastos 16	100	nursing

TABLE 66 - Continued

LOANS

Reference	Date	Amount in Drachmas	Connection To Other Contract
I, 29	Sebastos 16	56	....
I, 31	Sebastos 16	100	slave mortgage
I, 50	Sebastos 25	620	....
I, 52	Sebastos 25	68	....
II, 63	Sebastos 28	100	nursing
II, 64	Sebastos 28	28	....
II, 80	Sebastos 30	100	....
II, 84	Sebastos 30	128	....
III, 108	Phaophi 5	100	residence
III, 111	Phaophi 5	500	nursing
III, 114	Phaophi 6	64	nursing
III, 132	Phaophi 10	68	....
III, 133	Phaophi 12	22	....
III, 137	Phaophi 25	100	nursing
III, 146	Neos Sebastos 2	100	cession
III, 153	Neos Sebastos 5	100	nursing
III, 155	Neos Sebastos 6	560	....
III, 156	Neos Sebastos 6	260	....
III, 158	Neos Sebastos 6	208	nursing
IV, 165	Neos Sebastos 12	100	nursing
IV, 169	Neos Sebastos 12	72	....
IV, 187	Neos Sebastos 22	26	....

TABLE 56 - Continued

LOANS

Reference	Date	Amount in Drachmas	Connection To Other Contract
IV, 192	Neos Sebastos 25	100	nursing
IV, 201	Neos Sebastos 28	100	....
IV, 209	Choiak 1	306	....
IV, 211	Choiak 4	456	residence
IV, 217	Choiak 9	80	nursing
V, 223	Choiak 11	156	....
V, 224	Choiak 13	24	....
V, 226	Choiak 13	140	....
V, 231	Choiak 17	120	....
V, 232	Choiak 17	128	....
V, 239	Choiak 22	60	....

The Economy of Tebtunis in the Mid-First Century: Conclusion

The Nile River controlled the life of Tebtunis in all aspects. The economy of the town, as well as that of the whole country, was focused on the annual rise and fall of the river, which had the power to turn the desert into a garden or the garden back into a desert. The economy of both town and country was so precariously balanced on the "good will" of the great god Nile,[1] that when he failed to rise the necessary sixteen cubits or showered them with an overabundance of twenty-five cubits, the entire strip of cultivated land and its inhabitants felt the effects directly. Most of the inhabitants of Roman Egypt came from the peasant class and lived in the chora; most of these peasants lived on such marginal incomes that any variation in the normal course of events could plunge the entire chora into grave difficulties.

Egypt was in microcosm, then, a reflection of the greater economy of the ancient world, which was what has been called a "traditional society."[2] In a "traditional society" abnormal events, whether human or natural, could directly shake the basic economic functions and cause widespread disaster, at worst, or difficulty, at best. A crop failure in Egypt raised prices of grain all over the world and possibly even led to starvation for the marginal people.

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1. Bonneau, Crue du Nile, passim. As one might expect, the Egyptians worshipped the source of their livelihood as a god.
2. W. W. Rostow, "The Stages of Economic Growth," (Cambridge: University Press, 1960), Chapter II, pp. 4-16.

Tebtunis was a smaller division of the microcosm of the "traditional society." The failure of the Nile flood directly affected the business life of the town, raising prices of grain, preventing some business transactions altogether and especially pressing the Tebtunite into one or more of the myriad types of loans. The loan may be considered the main economic indicator for the state of the economy, but the other contracts which are listed in the grapheion documents for the years under discussion also contribute to the formation of a picture of the economic situation in Tebtunis in the year A.D. 45-6. These are the leases, service contracts, marriage agreements, and possibly the sales and cessions. With the available data we will seek to ascertain the condition of the flood for A.D. 45-6, whether this was a famine year with moderate or extreme consequences.[1]

Pliny the Elder commented on a good flood:

> A rise of 16 cubits is good. If less, the irrigation is incomplete; if more, the slow subsidence of the flood hinders cultivation. In the latter case the land is soaked and the proper moment for seeding is lost. If the flood is slow, the parched land does not yield a crop. In either case the province is deeply concerned. With 12 cubits famine results, with 13 the country goes hungry, 14 cubits brings cheer, 15 security, and 16 the delights of prosperity.[2]

He further reported that there was an excessive flood of 18 cubits

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1. The subject of whether there was an economic depression in the first century and its causes, has been much debated. One of the recent books which has presented this debate is G. Chalon's L'Édit de Tiberius Julius Alexander: Étude historique et exégétique, (Olten and Lausanne: Urs-Graf Verlag, 1964), pp. 55-69. This paper, However, will concentrate upon the problem in Tebtunis alone.
2. Pliny, Natural History, V, 58, trans. by H. Rackham (Cambridge: Harvard University Press, 1938).

sometime during the reign of Claudius,[1] a possibility strengthened by the listing of a high flood during the time of Claudius in an inscription.[2]

If, as Pliny says, the Nile failed to achieve the desired 16 cubits, then drought and its result, famine, afflicted the countryside. If, on the other hand, the flood were too high, the disaster was twofold. The peasants could not plant at the normal time, the crops were late or ruined entirely and in the Fayum especially, the irrigation works, the dykes and canals would have been ruined along with the crops. The irrigation system was needed after the retreat of the water, even during a normal flood.[3] In the midst of a difficult agricultural time, the people of the chora would also have been called upon to repair the dykes before the off-season when this task was usually accomplished.

If the flood were uncommonly high, then the usual wheat crops could not be planted in the areas which the waters left last. The substitute crop which could be planted was chortos, hay or fodder. In the first quadrimester of A.D. 45-6, 29 percent of the crops designated in the anagraphe are called chortos.[4] Chloron which includes lentils, wheat, and barley, makes up 51 percent of the designated crops in the same time period. In the final quadrimester of A.D. 45-6, 71 percent of the designated crops are called chortos

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1. Ibid.
2. Corpus Inscriptiorum Graecorum 4863, Column A.
3. J. Vandier, La Famine dans l'Égypte ancienne, (Cairo: Institut français d'archaéologie orientale, 1936), pp. 47-8.
4. See Table 27, above, p. 158.

(ten out of fourteen) and in the first third of A.D. 46, the amount of chortos is 62.5 percent of the total number of crop designations (five out of eight).

These statistics must be approached cautiously. Very few of the lease entries in the anagraphai specify the crop. These percentages represent a very small group of chortos-crop designations in the entire population of leases. However, since the crop specification is largely accidental or dependent upon either the scribe's whim or the room left on the papyrus to complete the entry, the fact that this number of crop specifications does occur at all signifies the larger total number of them that year. We would expect more leases for cereal land anyway, since Tebtunis does not seem to have been known for cattle grazing.[1]

The increase in fodder crops indicates the possibility of the high Claudian flood having occured in A.D. 45-6 or the year before. Other contracts, by their presence or absence strenghten this possibility. The leases show an interesting distribution. There are fewer leases in the first quadrimester of A.D. 46 than in the first quadrimester of A.D. 45;[2] the latter had a total of seventy-seven leases of all types entered and the former had a total of forty-eight. In one year's time this is a drop of 60 percent in the total number of leases. The would-be lessees of Tebtunis saw the adverse flood

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1. A. C. Johnson, "Papyri from Tebtunis, I," AHR 40 (1935), pp. 480-2; cf. K. S. Gapp, "The Universal Famine under Claudius," Harvard Theological Review 28 (1935), p. 259, note 7.

2. See Table 22, p. 134.

conditions and did not want to assume the risks attendant upon leasing. The would-be lessors, on the other hand, also saw the risks and demanded prepayment of the rent in a prodomatic lease, so that they would have some protection from a bad return.

The prodomatic leases may have involved prepayment of rent to allow the lessor to have some security in an insecure time. But the prodomatic lease can also be connected to a loan or be a loan itself. In this lease/loan situation, the lessor was the debtor who needed money and was willing to work his own land in exchange for the rent in advance. The lessee took the risk of a bad harvest, but if he were a daring and wealthy speculator, he might do well.

The prodomatic leases in the first quadrimesters of A.D. 45 and A.D. show an increase of only two leases from seventeen prodomatic leases in A.D. 45 to nineteen prodomatic leases in A.D. 46. Whereas the prodomatic leases of A.D. 45 make up only 22 percent of the lease volume, the prodomatic leases of the next year make up 40 percent of the lease volume. If all of these prodomatic leases were loans, the Tebtunites would appear to be greatly in need of funds. If these prodomatic leases were merely advance payments of rent for the security of the lessor, then the flood conditions were bad enough to warrant the attempt to gain this security. The distribution of the leases, both regular and prodomatic, does not tell us the height of the flood, but it does indicate its failure.

The service contracts add to the dismal picture of a bad year. While the paramone contracts do not show any great deviations from one quadrimester to another, the nursing and apprentice contracts show the Tebtunis peasants in difficulty. The nursing contracts

appear in greater abundance in A.D. 45-6 and the first quadrimester of A.D. 46-7 than the three entries for this kind of service in the last four months of A.D. 42 would lead one to expect. Most of the children to be nursed were slaves. In hard times the marginal peasant would not be able to rear their newborn children and consequently, exposed them to the elements and the will of the gods.[1] The more comfortable people of the town, not yet driven to such exigencies were free to take up one of these exposed children to be reared as slaves. Slave ownership was not very common in the chora, so this was a way of procuring a relatively "cheap" slave and possibly adding the luster of slave ownership to one's village prestige. The mother of an exposed child would be free to nurse another for pay, although the average pay she received in advance decreased from 120 drachmas to 100 drachmas from A.D. 45 to A.D. 46. Even the well-to do Tebtunite appears to have felt the effects of the bad flood.

While there are greater numbers of certain types of leases and service contracts, there are fewer apprentice contracts. During the eight-month period from Pachon, A.D. 46 to Choiak A.D. 46 no boys of Tebtunis entered into an apprenticeship. Since most of the extant apprentice contracts in the papyrological corpus are the kind where the master pays the apprentice for his work, it is possible that most of the Tebtunis apprentice contracts would be this kind too. The craft masters could not afford the cost of an apprentice and had to wait for better times.

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1. K. S. Gapp, loc. cit.; A. C. Johnson, loc. cit.

Not only were the youths of the village going without their training in a trade, brides were going without dowries, or were not marrying at all. The dowry contracts appear in great abundance in the last quadrimester of A.D. 42 and the first quadrimesters of A.D. 45-6; there is an average of twelve contracts for dowries per quadrimester.[1] In the final quadrimester of A.D. 45-6 and the succeeding quadrimester the volume decreases 33 percent per quadrimester. The first third of A.D. 46 is 55 percent lower in the number of dowries than the preceding year. In addition, the amount of the dowries increased to an average well over 200 drachmas per dowery. The women who married at this time were the pampered daughters of the upper class Tebtunites.

It is doubtful whether the distribution of sales and cessions can contribute very much to the economic picture of the times because there are so many reasons for a sale or cession, other than economic distress. There are fewer sales of both real property and livestock in the first quadrimester of A.D. 46, but there are more cessions.[2] Weavers still bought looms, farmers still bought donkeys, but some men sold their land because they needed money.

The great variety of possible loans available to the peasant must have been alluring in bad times. The debtor could exchange his interest payment for his labor (paramone), his lease (prodomatic lease), or provide the right of lodging to his creditor. He could also mortgage his house or land, hold someone's interest free deposit

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1. Table 36, p. 220.
2. Table 41, p. 248.

at the risk of having to pay it back unexpectedly or he could take a loan at 12 percent interest.

In comparison with A.D. 45, the number of deposits rose in A.D. 46 by 93 percent from fourteen deposits in the earlier quadrimester to 27 in the later one.[1] Residence contracts show a similar increase from ten contracts to seventeen, a rise of 70 percent. The mortgages[2] stayed the same with four entries in the first quadrimesters of A.D. 45 and A.D. 46, but the loans increased in volume by 77 percent in those months. The final quadrimester of A.D. 45-6 is even higher than the first third of the new year, by 9.4 percent, and higher than the final third of the year A.D. 42 by 18.5 percent. There were many more loans being made around the new year.

If a count is made of all the contracts in the eighteen months of A.D. 45-6, the total number is 928. Of these, 308 are either certainly loans or potentially loans; 33 percent of the business contracts entered in the anagraphai during the period Sebastos, A.D. 45 to Choiak A.D. 46 were (or could be) loans.

The high flood with its resulting famine, high prices, and tax defaults could indeed have occurred in the year A.D. 45-6 or perhaps the year before. Tebtunis, and every other Fayum town, endured a year, and probably longer, of hard times.[3] Fortuitously, the anagraphai of the grapheion of Tebtunis survived to reveal the year that

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1. Table 47, p. 267.
2. Table 53, p.
3. P Mich. Browne 594 is an account of taxes in arrears extending from A.D. 45-6 to A.D. 50-1. This suggests a long term depression.

paradise, the Fayum, became again a swamp.

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